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Influencing Play through Design

The Avatar

A thesis

submitted in fulfilment

of the requirements for the degree

of

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Abstract

This thesis aims to examine if the visual features of virtual identities that players use to represent themselves within different game worlds may influence their interactions within those game worlds. If such a correlation exists the thesis aims to build a better understanding of the level of influence these visual features have on how a player interacts within a game world.

In order to identify and evaluate any correlations between differences in visual avatar features compared to any differences in playstyle the research involved conducting an online survey in addition to a small scale observation study. To differentiate the players and create groupings to better identify differences the thesis examines the concepts of player types (Bartle, 1995) and player motivations (Yee, 2005). Through the use of which it was able to properly explore a player's behaviour and the influencing motivations behind it, while being able to compare these motivations to the visual features the player’s virtual identity may possess.

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Chapter 1: Introduction

This first chapter covers the motivations behind this research, the focus and overall aim of the research, and clarifies the thesis structure.

1.1 Motivation

There has been a shift in recent years towards an increasing interest in video games, treating them as things worthy of academic analysis. This research into the nature of games is known as games studies, with the new area of video game studies emerging in 2001. Previously with the dominance of film and television studies, video games have been considered mostly as just trivial pastimes. This has resulted in much of the previous research being conducted in a similar manner to that of film and television studies without consideration to the fundamental differences in interaction between these mediums. As Espen Aarseth (2003) has pointed out, a large area of game studies research was conducted before anyone thought to ask about how it should be conducted. However in recent years the stigma that once surrounded playing video games has decreased due in part to advances in technology but also thanks to mainstream media portraying them as more socially acceptable pastime. This has resulted in their overall popularity skyrocketing, and researchers needing to acknowledge the need for academic analysis.

With the rise in popularity of gaming and the ever increasing integration of social media with our gaming habits the concept of a ‘hyper reality’ has potentially become a reality. Hyper reality is a theory conceived by postmodern theorist Jean Baudrillard (1983) which states that as our world is so saturated with media, it is no longer possible to distinguish what is real. Players may inhabit virtual worlds, interacting with each other, building relationships with each other, all without any aesthetic identifying features between them other than the features they choose to display through their virtual identity or avatar. This allows players to portray themselves within the social environment of the game world as whoever they desire to be, to experiment with their identity with minimal consequences to their real life. However as designers how much control do we have over this experimentation? If the game world itself inherently forces the player to role-play to some degree, would it be possible to mold the behavioural choices of the player by manipulating the representative aesthetic features available to them? For example, could we encourage a player who created an ‘orc’ in ‘World of Warcraft’ to play in a style that has been predetermined to be thematically appropriate by creating avatar features that go along with that design?

1.2 Aim and Methodology

This project aims to look at the possibility that the aesthetic features of the virtual identities players use to represent themselves within different game worlds may influence how they interact within that game world. In addition

if this influence does exist, is it possible that game designers have the power to passively control the behaviour of the player within the game world allow them to create a more rich immersive experience for all players by factoring in this influence.

The goal of this project is to evaluate any correlations between differences in visual avatar features and differences in playstyle. If such correlations exist we can build a better understanding of the level of influence the avatar has on how a player interacts within a game world. The overall goal is to produce a set of results that at least prove proof of concept, highlighting the need for further research into the subject.

To achieve this the research method will consist of both an online survey and a small scale observation study. The survey will serve to identify areas of interest to further examine in the observation study and will be focused on comparing the avatar race and gender of a popular Massively Multiplayer Online Role Playing Game (Defined in following chapters) against their chosen play style and motivations.

In order to differentiate players and create groupings to better identify these differences in how different players ‘play’ the thesis examines the concepts of player types (Bartle, 1995) and player motivations (Yee, 2005). These allow the research to properly explore a player's behaviour and the influencing motivations behind it, while also providing a means to group and compare multiple players. By grouping respondents by their choice in avatar based on the graphical features they possess the research can produce a simple generalized set of player motivations for each different group. These can then be compared to identify any potential

correlations to be further examined in an observation study, the results of which although far from conclusive may provide proof of concept to conduct a much larger study in the future.

The observation study will then examine the possibility of controlling the player by manipulating the appearance of their avatar, to better suit the appearance of the avatars within the survey. If the change in avatar appearance significantly affects how the participant plays the game we can assume this influence exists and warrants further study. In addition if this change in appearance corresponds to the results of the survey, we can say the change is in some way controllable by designers.

1.3 Structure of Thesis

This thesis is divided into chapters, the contents of each of these chapters is defined below:

Chapter 1.

Chapter 1 provides the overall focus and aims of the research along with the motivation behind it.

Chapter 2.

Chapter 2 contains a literature review covering the themes surrounding avatar motivation; the basics of play, videogame values, and immersion. It then draws from the described themes to outline the established means to

identify avatar motivations. It aims to provide definitions of key areas of research, and develop the concepts described in the previous chapter.

Chapter 3.

Chapter 3 applies the concept of player motivation components to the results of a survey conducted during the research examining the motivations and customisation choices of a large number of online gamers.

Chapter 4.

Chapter 4 outlines the methodology and results of an observation study conducted during the research, with the purpose of identifying potential correlations between player motivation and avatar aesthetics.

Chapter 5.

Chapter 5 contains an analysis of the results from Chapter 4, in comparison to the results from Chapter 3. It outlines the weaker aspects and limitations of the observations study, followed by a suggested improved future study based on these limitations.

Chapter 6.

Chapter 6 provides a complete summary of the thesis, including overviews of the methodologies used and the results obtained.

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Appendix.

Chapter 2: Background Information

In this chapter we introduce the concepts surrounding how a player might interact with a video game, how we might measure these interactions, and what affect they may have on the player. The aim is to build an understanding of how we as designers might better facilitate the player by first understanding the level of influence visual features possess over their experience. Aarseth (2003) supports a multi-disciplinary approach to game study research, suggesting the focuses being on: game play, game structures, and game worlds. In this chapter we examine ‘2.1 Play’, ‘2.2 Values’, ‘2.3 Immersion’, and how these elements are used within the research in the form of ‘2.4 Categorizing Players’. Firstly we will establish a working definition of ‘Play’, and examine how we might quantify it through ‘Activity Theory’. We then examine the concept of ‘Values’ and how they might influence the player during act of play, and how video games might manipulate or create these ‘Values’ through ‘Immersion’.

2.1 Play

Games can be framed as either activities or as objects (Barr, 2007). Games as objects focuses on the system, whereas games as activities focuses on studying game in relation to ‘play’, rather than as software. The players ‘experience’ while playing rather than the games iconography (Wolf, 2001; Myers, 1990; Aarseth et al, 2003). In order to better understand play and its connections and differences from game it is

important to first find a working definition. This section covers a range of different takes on the concepts of play, touching on its connection to game. The definitions in question focus on trying to define play in a broad sense.

Johan Huizinga provides us with our first definition of play, seen by many games scholars to be too broad or confusing to be applicable to games studies (Frasca, 1997; Juul, 2005). However it provides us with a starting point to better understand the following definitions.

> *"Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'."* (Huizinga, 1944: 28)

Salen and Zimmerman (2004: 75) state that Huizinga's definitions largest weakness is that it's far too general, and fails to differentiate between terms 'play' and 'game'. Additionally Frasca (2007) criticises Huizinga's assumption that 'play' must be separate from 'ordinary life'. He uses the example of a small child: the child spends a large portion of each day playing, how then can the activity of 'play' be outside the bounds of the child's 'ordinary life'.

Caillois offers a list of formal attributes of play or game (Caillois wrote in French, in which the term for both 'play' and 'game' share the same term

of ‘jeu’) though warns that it is a provisional definition and may not apply to a range of games including puzzles, horsemanship, and seesaws (Caillois, 2001: 9). His attributes are:

1. ***Free:*** *in which playing is not obligatory; if it were, it would at once lose its attractive and joyous quality as diversion;*
2. ***Separate:*** *circumscribed within limits of space and time, defined and fixed in advance;*
3. ***Uncertain:*** *the course of which cannot be determined, nor the result attained beforehand, and some latitude for innovations being left to the players initiative;*
4. ***Unproductive:*** *creating neither goods, nor wealth, nor new elements of any kind; and, except for the exchange of property among the players, ending in a situation identical to that prevailing at the beginning of the game;*
5. ***Governed by rules:*** *under conventions that suspend ordinary laws, and for the moment establish new legislation, which alone counts;*
6. ***Make-believe:*** *accompanied by a special awareness of a second reality or of a free unreality, as against real life.* (Caillois, 2001: 9-10)

Scholars tend to find fault in Caillois attributes of *play* mainly focused around his 5th attribute. Although it is a commonly held belief that ‘games’ have rules, there is no such agreement in place for whether *play* does or

even can have rules. Both Juul (2005) and Frasca (2007) disagree with attribute 4 on the basis that certain instances of play can create wealth and/or goods. For Juul (2005) the existence of the gambling industry invalidates the attribute since the act of gambling results in either a gain or loss of wealth. Similarly Frasca (2007) describes activities like drawing, or building sand castles which do create goods. Additionally, dramatic and musical performances do have economical value as people pay to attend plays/concerts.

In his work “Narrative, Interactivity, Play, and Games: Four naughty concepts in need of discipline” Zimmerman gives us the following definition:

> *"Play is free movement within a more rigid structure. Play exists both because of and also despite the more rigid structures of a system."* (Zimmerman, 2004: 304)

The definition is rather abstract but as Zimmerman states this can actually be an advantage. His reasoning is that the definition focuses on the relationship between the elements of a system. This is very close to the working definition of play used commonly in game studies where the player is free to move within the confines of the game world, only to the extent of the game designers will. The designer creates the world, the play emerges as the player navigates through it. Zimmerman goes so far as to say that even if the player cheats, or breaks the structure of the desired

narrative, the aspect of play remains as it is merely another form of play within the designed system. In addition to his definition of play, Zimmerman also offers a definition of *game* which states:

> *"A game is a voluntary interactive activity, in which one or more players follow rules that constrain their behavior, enacting an artificial conflict that ends in a quantifiable outcome."* (Zimmerman, 2004)

He states that games share the same structure-play relationship as other rule structured activities, where play emerges from the free space of movement within the rigid structures. The games rules serve to limit the players behaviour, to participate the player must submit themselves to the restrictive nature of the rules. The concept of literal space in games being related to play is a common discussion topic for games studies. In their work 'Nintendo and new world travel writing' Fuller and Jenkins characterised play within games to be largely about this movement through space. They theorise that regardless of narrative, what never loses interest is this movement into the next space, and the mastering of the challenges it contains. A sentiment shared by Simon Engenfeldt-Nielson who regards the navigation and in particular the exploration of space to be integral to play, describing it as a basic drive for play.

Gonzalo Frasca has written extensively on understanding play, and its connection to video games specifically (Frasca, 1999; Frasca, 2007). In

his work “Play the Message” Frasca analysed the definitions of play offered by Huizinga (1999: 28), Caillois (2001: 9-10), Sutton-Smith and Avedon (1997: 217), and Salen and Zimmerman (2004: 304) in an attempt to create a working definition for ‘play’. A definition he calls the ‘New general definition of play’:

> *“Play is to somebody an engaging activity in which the player believes to have active participation and interprets it as constraining her immediate future to a set of probable scenarios, all of which she is willing to tolerate.”* (Frasca, 2007: 50)

2.1.1 How to evaluate play?

The terms ‘Play’ and ‘Game’ are often confused or combined, mainly due to the fact that many western languages do not distinguish between them, and instead only have one term that applies to both words. In an attempt to eliminate any language limitations Caillois suggests the use of two the alternate terms: Paidia and Ludus.

> **Paidia:** *“..an almost indivisible principle, common to diversion, turbulence, free improvisation, and carefree gaiety is dominant. It manifests a kind of uncontrolled fantasy.”* (Caillois, 2001: 13)

> **Ludus:** *"..frolicsome and impulsive exuberance is almost entirely absorbed or disciplined by a complementary, and in some respects inverse, tendency to its anarchic and capricious nature: there is a growing tendency to bind it with arbitrary, imperative, and purposely tedious conventions, to oppose it still more by ceaselessly practicing the most embarrassing chicanery upon it, in order to make it more uncertain of attaining its desired effect. This latter principle is completely impractical, even though it requires an ever greater amount of effort, patience, skill, or ingenuity."* (Caillois, 2001: 13)

Frasca uses *Paidia* and *Ludus* when examining ideology in video games as a way to explain how game design influences players. He argues the the complexity of the rules is a characteristic that is difficult to quantify suggesting that the main distinction between both categories is that Ludus games define winners and losers, while Paidia games do not (Frasca, 1997: 30). Within the scope of game studies, in his work "Video Game Values: Play as Human-Computer Interaction" Pippin Barr defines Paidia and Ludus as:

> **Paidia:** *"...the sustained belief that creative and exploratory conduct for its own sake in a videogame is preferable to other forms of conduct during play."* (Barr, 2008: 73)

> **Ludus:** *"...the sustained belief that following rules and conventions in order to achieve defined goals in a videogame is preferable to other forms of conduct during play."* (Barr, 2008: 73)

In this way we can begin to evaluate the type of play occurring as a player interacts with a video game. A player leaning more towards Padia would be more likely to undertake unstructured activities such as exploration or experimentation of game world physics. In contrast a player leaning more towards Ludus would be more likely to focus on objective based progression.

2.1.2 Activity Theory: Turning play into Interaction

Video games are a form of software and therefore an area of study for Human-Computer Interaction (HCI). When framing games as objects the focus is on the system, the player is participating within the game. Whereas framing games as activities shifts this focus onto the player and their interactions. However interaction with video games, like interaction with any game differs from that usually displayed within the field of HCI. This is caused by the difference between the terms 'user' and 'player'. HCI focuses on how we use systems, however we do not 'use' video games, we 'play' them. Barr suggests the use of 'Activity Theory' as a means to analyse play in relation to video games (Barr, 2008). Activity theory was originally developed in the 1930's by psychologist A. N. Leont'ev, and has been adopted by HCI researchers as a way to describe how users interact

with software (Barr, 2008; BØdker, 1991). Leont'ev defined activity as a process in which "one or more people transform an object in an acknowledged cultural or social context" (Leont'ev, 1978). The unit of measure is the activity consisting of a subject, an object, artifacts, and motives (Kaptelinin, 1999). These components are outlined as:

Subject: The person (or persons) engaged in the activity.

Object: That which through the subject doing the activity will be transformed.

Artifacts: Anything used by the subject in the transformation of the Object. This could include both physical artifacts such as the keyboard, and virtual artifacts such as components of the user interface.

Motives: They are what drives the subject to engage in an activity. They explain why the subject wishes to transform the object. Leont'ev states that "the concept of activity is necessarily connected with the concept of motive. Activity does not exist without a motive." (Leont'ev, 1978)

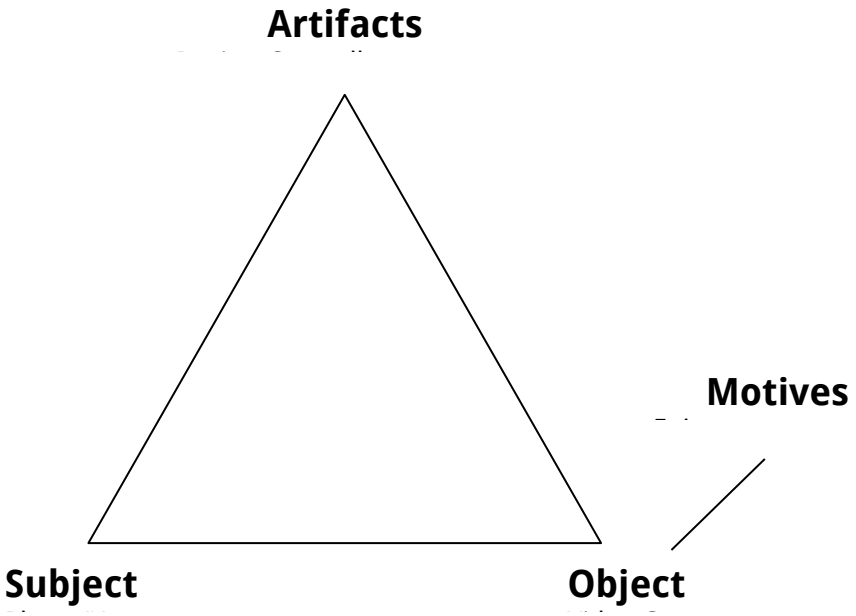

Figure 1: Activity model applied to video gaming

According to Leont'ev, interaction between human beings and the world can be organized into three hierarchical levels. Leont'ev titled these three levels: activities, actions, and operations. Activities are created by the Motives of the Subject. An activity is comprised of a chain of Actions that only make sense within the context of the activity and the motives behind it. Therefore in order to realise the Activity the Subject must perform actions with conscious goals in mind. Operations are unconscious, reactive responses dependant on the activities conditions, they are how the subject responds to compromising circumstances that affect the execution of actions. Conditions such as the location of different user interface elements will alter how the subject will carry out an operation.

HCI Researchers have adopted this hierarchy model as a way of explaining different levels of interaction with software. Barr (2008)

believes this can be expanded to include the contributing factors behind the generation of motives. He asserts that values can contribute towards or even provide motivation. “This occurs when a player engages in particular activities in order to satisfy one or more of their video game values” (pp. 99).

2.2 Values

Values are a core conceptions of desirable behaviour within every individual and society. They serve to govern not only our every action but our judgements, behaviour, attitude, reasoning, and rationalizations. They are capable of being structurally organized within both the individual and within society not only in terms of priority or preferred status, but also in terms of extensiveness and consistency (Williams, in Rokeach, 1979). Rokeach provides us with a working definition of values as:

> *An enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.* (Rokeach, 1979: 227)

A real life example is that of bravery: the value of bravery would lead to such conduct placing the lives of others above your own rather than selfishly acting only in your best interests. This is also what’s known as a

‘preferred value’ or a value that society has deemed to be positive, and by doing so passively encourages people to inherit.

2.2.1 Applying Values to Video Games

If we look then to video games we can begin to see how a player's values can influence their play. On a very basic level we can say that values influence the choices inherent to all video games in terms of what the player will or will not do. However inconsistencies arise when we compare real life values to the values a player may exhibit during play. Would a player follow the rules a video game presented to them, or try to bend/break them to achieve more? To many the video game world is a bounded space where the ludic expression of real life inappropriate activities can be explored, as the ‘normal’ rules do not apply. The act of cheating for example is treated differently depending on the type of game world. If the act of cheating in some way disadvantages others, or is deemed unfair to those also playing the game it is punished. This results in many games that have multiple players existing in the same game world treating the act of cheating harshly, similarly to that of real life. However often people cheat in games for different reasons such as when they get stuck; within the confines of a single player game this wouldn’t negatively impact anyone outside of the player themselves. It is common practice for single player games to include some sort of cheat system, it is up to the values of the player if and how they wish to utilize these systems. However some might argue that even the inclusion of these systems

promotes their use, thereby promoting the values that control the action of cheating.

Would a player go against their real life values if it was the only way to win, for example “would a player shoot a dog if it was the only way to win the game” (Consalvo, 2005: 9)? Consalvo (2005) states that although some players keep connections between the rules of their non-gaming and gaming lives, others draw distinctions. Similar to Huizinga’s (1944) theory that ‘play’ exists outside the realm of ‘ordinary life’, for many players the game world is a “space apart where normal rules don’t apply” (Consalvo, 2005: 9).

Perhaps the most controversial question posed when examining video game values would be if going against a player's real life values and being rewarded for doing so in some way diminish these values in the eyes of the player. It is generally accepted that within the confines of a fantasy reality created within the video game, actions that go against the preferred values of real life (such as murder) are potentially more acceptable depending on the video games values. For example a player playing ‘Final Fantasy XIV’ (2013) is rewarded for going out into the wilderness and happily killing the wildlife, an act that would be seen as reprehensible outside the confines of the video game. However there have been occasions where the lines between video game values and real life values have been called into question, a famous example of which occurred in the game “GTA: Vice City” (2002). Although the game is played within its own fantasy city of ‘Vice City’ it was common knowledge that this fantasy city was heavily based on Miami, Florida. At a certain point during the

game the player was given a mission wherein there were ordered to “Kill the Haitians!”, within the context of the game the meaning of which was to kill a Haitian criminal gang. However as the Haitian people exist outside the game the mission and the game received strong criticism from US-based Haitian organizations claiming it was promoting anti-Haitian sentiment. The act of killing is a common occurrence in videogames, but as the example shows there is a clear distinction between killing generic fantasy characters and incorporating real life personifications.

> *There may not be a lobby defending orcs but the moment games incorporate non-fantasy characters with specific ethnicities, beliefs, cultural backgrounds, things change. Suddenly, politics walks into the scene.* (Frasca, 2008: 116)

In his work “Video Game Values” Barr (2008) conducted a range of observations on how people interact with different games from multiple genres. His findings support the idea that there is a fundamental notion of value behind all interactions. Furthermore the values of play he observed did not come solely from the player, rather they were in some way embodied in the game they were playing. This indicates that by constraining a players ‘play’ game designers are able to create a set of ‘preferred values’ for the game to embody, and by doing so steer the activity of play in the direction the game intends.

2.2.2 Can these Values be influenced?

The concept of changing someone's values is not a new one, however the potential level of control over this change is still undetermined. Value change, and resulting changes in behaviour can come about in two ways. Either through naturally occurring changes brought about by changes in the individual's needs and perceptions of social demands, or because of a rise in self-awareness concerning internal contradictions (Rokeach, 1968). The idea that our values can be influenced logically gives way to ethical unease over the possibility of an unknown force influencing our values for malicious reasons (Schwartz, 1974). But is it really possible to manipulate people's values arbitrarily for personal benefit? The unidirectional hypothesis proposes that although it is possible to change someone's values by arousing a state of self-dissatisfaction, their values cannot be arbitrarily manipulated (Rokeach, 1978).

William Conroy (1976; in Rokeach, 1978) talks about modifying a person's behaviour by first changing the values that underlie that particular behaviour. On the topic of value therapy he suggests that by acting on self-dissatisfaction towards values relating to health destroying behaviours (such as smoking, drug abuse etc.), an individual can change their behaviour as a result of modifying the behaviours underlying values. Further experimental work suggests that this change in values can be induced not only face-to-face but by interacting with computers. In his book "Understanding Human Values" Milton Rokeach talks about a number of experiments addressing the possibility of being able to change someone's values and in doing so modify their behaviour. All the

experiments Rokeach outlines would seem to suggest that values can be influenced, that that influence can become permanent, and that this change in values can lead to persisting changes in behaviour. However Rokeach states that the overarching ethical question of “Can values be arbitrarily manipulated?” is one too complex to settled without further extensive research.

2.2.3 How Video Game Influence Values

Video games encourage certain forms of conduct. This promotion of preferable conduct takes place in the interactive elements the game provides for the player. By interpreting these elements the player decides on what actions to take to proceed. If the video game is a ‘first person shooter’ the interface will reflect that and provide the player with elements designed to aid them in that design. By doing this encourages the player to perceive adhering to the design is intuitively the ‘right’ thing to do, thereby promoting the video game values within the player. To reinforce this video games often use the technique of ‘operant conditioning’.

Operant conditioning is a method that relies on positive reinforcements after instances that positive behaviour is displayed. By rewarding these instances of positive behaviour the subject will increase the amount they display them in order to gain more rewards, in this way it is possible manipulate or shape complex behaviours (Skinner, 1974). Video games provide reinforcement though a number of ways both through visuals and sound, but also through the actual game mechanics. Any form of point

collection, levelling system, high scores, ranking, or arguably all forms of progression can be seen as positive reinforcement for the player. By adhering to the values of the video game and behaving in a way suitable to these values the player is rewarded by progressing through the game. In this way video games may be the “purest example of technology using operant conditioning” (Fogg, 2003).

2.3 Immersion

In her book “Hamlet and the Holodeck”, Murray (1997: 147) stated that the most important aspect to consider when designing immersive video games was impacting the player emotionally. Immersion being the sense that a player has of being within a virtual world (Lombard, 2004: 97). For Murray, the goal was find ways to draw the player into a game world so deeply that the player experienced the “situated point of view of a character” to the extent that any change in this view would raise important moral questions for the player. Waggoner (2009) believes that this has been achieved within the video game genre of role playing game or ‘RPGs’.

2.3.1 Role Playing Games

Role playing games are an evolution from the table top game genre of the same name. The player controls a character central to the plot and navigates through the narrative of the game while also exploring, puzzle solving, and engaging in some form of combat (McNaughton, 2004).

Characters are built from both visual and mechanical features, visual being how the character looks like, and mechanical being how the characters aptitude within the game world is constructed. Similar to table top role playing games a player's character contains a number of attributes, skills, traits, and the allocation of these attributes will determine how the character will perform in different situations (i.e. a character high in the ‘strength’ attribute will likely excel in combat). Often the characters attributes will act as damage modifiers for that character's skills, it is therefore beneficial for the player to allocate more attributes towards what they intend the character to excel at (Diveky & Bielikova, 2009).

The narrative provides a large part of the entertainment in role playing games and the player's progression within it provides the immersive nature of the genre (Adams, 2006). It is typically separated into a number of ‘quests’ for the player to complete, often with additional optional quests available outside of the main narrative. A quest being defined as “a journey across the game world in which the player collects items and talks to non-player characters in order to overcome challenges and achieve a meaningful goal” (Diveky & Bielikova, 2009). By completing quests and challenges the player is rewarded and as a result grows in power, usually through some kind of ‘experience point’ system, where the player must accumulate a certain amount of experience points in order to increase their character's level (Rollings & Adams, 2003). Upon reaching a new level the character's attributes will increase and it will often receive new skills. This level of customisation ultimately changes the narrative depending on the player's choices, resulting in the player contributing

towards the creation of the narrative while also existing within it through their character.

If then as we have discussed, games require an adherence to rule based structure and role playing games can be seen as the player creating and existing within a narrative that in turn requires a certain degree of suspension of disbelief; we must further examine how the player is involved with actions the character performs. This involvement can be seen as a chain of interactions and is frequently discussed as the 'point of view' a player adopts during play. Jason Rhody has discussed ways in which the player's *point of view* can be seen as both being part of the fictional world and separate from it. He focuses on the means of interacting within the game world through an interface separate from the game world, such as 'heads up displays' which overlays a user interface onto the representation of the game world (pp.210).

2.3.2 The Avatar: An Introduction

The term avatar is used in several different ways by game scholars but the origins of the word are clear. The term originated in Sanskrit as 'Avatara' meaning 'descent' referring to incarnation, a bodily manifestation of an immortal being. With the development of video game technology and the conception of virtual space the term has been carried over to mean in a broad understanding "the user's representative in the virtual universe" (Filiciak, 1997: 89).

This is commonly confused or combined with the term ‘Agent’ yet differs mainly on one key point. Athoman Goldberg (1998) defines agents as “semiautonomous pieces of software that assume some visual embodiment” as opposed to avatars which he defines as “representations of ‘real’ people in computer generated environments” (pp. 161). This has been criticized by Waggoner (2009) claiming these definitions are too vague, using the example of Pac-Man who could be considered as either an avatar or agent using Goldberg's definitions. Instead Waggoner cites a more refined definition of avatar provided by Laetitia Wilson:

> *A virtual, surrogate self that acts as a stand in for our real-space selves, that represents the user… Avatar spaces indisputably involve choice in the creation of one’s avatar; there is substantial scope in which to exercise choice and create meaning. (Wilson, 2003; cited in Waggoner, 2009: 9)*

Waggoner (2009) claims that it is this creative choice that is the defining feature between agents and avatars that is crucial to understanding how users connect with video games, leading to them becoming immersed within them. It also allows us to properly identify avatars. Returning to his example of Pac-Man Waggoner states that as Pac-Mac’s appearance and skillset never change, therefore he must be an agent.

2.3.3 The Avatar: Virtual Identity

The most common example of video game avatars can be found when examining the genre of ‘Massively Multiplayer Online Role Playing Games’ or MMORPGs. The reason for this other than the general popularity of the genre is that a central tenant to all MMORPGs is the quality of persistence: thousands of players may exist within this game reality through their avatars at any one time, though the game world itself persists independently. An individual player may log off, exiting the game world yet other players continue to interact with the game and each other (Snodgress, 2013; 238). This persistence results in the game worlds housing large communities of mostly anonymous players, recognisable only by the identity created through their in-game avatars.

When a player interacts with the game world through their avatar they take on the identity of their avatar. Similar to an actor taking on the role of a character, and in playing the character the actor comes to understand that character (Goetz, 1995). Stephen Poole (2002) called the avatar ‘a comparatively blank canvas’ onto which the player projects their own imaginary structures. By doing so the player changes the character to fit their image, and in doing so becomes more immersed within the narrative. Goetz (1995) argues that along with changing the character to fit the player, by doing so the player is also changing themselves to fit the character. They create the version of themselves that exemplifies the values that they most want to portray, in his words they “find a ‘you’ that you like to be” (pp.62-67). In playing the avatar the player comes to better understand their character and their role in the game world. As players

interact with the game world through their avatars they become more aligned with their characters, resulting in the players becoming more deeply immersed in their virtual identities, and in turn the game world in general. Any perturbations in the character experienced by the player are received positively or negatively and are fed back into the player's self-image: in this way the virtual world provides the player, through their avatar, a mirror for player to reflect upon themselves (Goetz, 1995).

A common argument is that users alter their identity because of the anonymous features provided by the nature of the online medium. As physical appearance cues are unavailable it allows players to break free of their social norms (Reid, 1993). A similar effect occurs during role-play, where the players is ultimately given the opportunity to play an aspect of themselves they do not play in the real world, or to play someone they could never be (Antunes, 1995). Reid (1993) argues that the invulnerability created through anonymity encourages people to let go of their social and cultural inhibitions. As their real life identity is masked, players are free to experiment with foreign values or features unavailable to them in their real life, such as gender identity. Similarly Calvert (2002) states that the anonymous nature of online interactions allows participants to freely express themselves, unconstrained by real world expectations. To this end much research has be done regarding men and women pretending to be the opposite gender online as a form of gender experimentation (Curtis, 1997; Reid, 1996; Turkle, 1995). Applying this to online games Gilligan (1982) suggested a difference in the way the two genders approach play. He asserts that that girls tend towards cooperative

play while boys prefer competition. If the player was able to take in the many considerations involved with roleplaying the opposite gender (Antunes, 1995) it is possible that through role-play and the anonymity of the online medium, people are able to gain a better understanding of their own identity. By removing the real life identity boundaries such as age, ethnicity, and gender, role-playing online allows for the breaking down and reconstruction of player's identity, with the only limits being those created by the player themselves (Reid, 1993). But if the identity of the player and that of the character exist independently, to what extent does one influence the other?

In his book “What Video Games Have to Teach Us about Learning and Literacy”, James Gee suggests a three distinct identities being involved in play. Firstly the virtual identity, belonging to the avatar within the fictional world. Secondly the real-world identity which for Gee is the ‘Real-World Character’, comprised of many different ‘non virtual identities’. He explains that we all have many non-virtual identities at all times that differ depending on the situation, identifying himself as a “professor, a linguist, an avid reader, a parent, ...” (pp.55). Gee’s third type of identity is the ‘projective identity’ which he describes as a sort of middle ground between the real-world and virtual identities.

> *The kind of person I want [Virtual Identity] to be, the kind of history I want her to have, the kind of person and history I am trying to build in and through her is what I mean by a projective identity. Since*

> *these aspirations are my desires for [Virtual Identity], the projective identity is both mine and hers, and it is a space in which I can transcend both her limitations and my own… In this identity, the stress is on the interface (the interactions between) the real-world person and the virtual character* (Gee, 2003: 56).

In this way it is possible for the avatar to become more than just the players virtual representation. Gee goes on to explain that he attributed feelings and motives to his virtual identity, and felt like he had 'let her down' when he performed an action against the principles of the character. The question we will explore in the following chapters is how much influence this developing virtual identity has over the way the player interacts with the game.

2.4 Categorizing Players

The previous sections (2.1, 2.2, and 2.3) assert that the way in which a player interacts within a game world is influenced by both the values contained within the player and game, and the extent that the player has immersed themselves within the game world. If this is the case then players within a game's community are able to be grouped depending on these variables. In order to achieve this categorization there needs to be a means of identifying a players values (or the motivations behind them). To

this end the following sections will draw on Bartle's (1995) 'Player Types' and Yee's (2005) 'Model of Player Motivations'.

2.4.1 Bartle's Player Types

Bartle's Player Types are a well-known model of identifying player motivations. In his work "Players who suit MUDs" (1995) Bartle outlines a categorization system involving 4 Player Types (Socializer, Achiever, Killer, and Explorer) as a way to identify how players might differ from one another (Bartle, 1995). These 4 categories are arranged on the axis below.

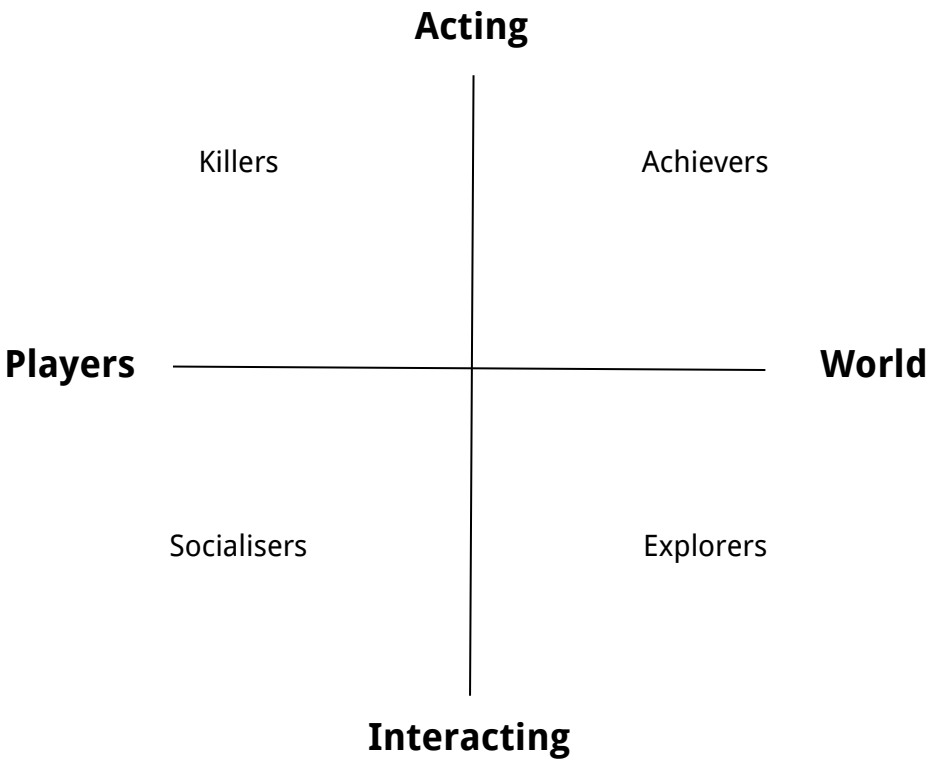

Figure 2: Bartle's Player Type Axis

Bartle (2003) later expands upon this figure by adding another dimension where he introduces the idea of player type's being a progression rather than a fixed state (i.e. a killer may progress into an explorer). Bartle's Player Types were originally conceived by examining 'MUDs' which he described as:

> *A computer-based text or virtual reality game which several players play at the same time, interacting with each other as well as with characters controlled by the computer.* (Bartle, 1995)

MUDs therefore are not unlike the MMO games of today with the only distinguishing factor being the number of users. Bartle goes on to explain that the Player Types are based on how each player is motivated to find enjoyment within the game. His types are outlined below:

Achievers. Motivated by setting themselves goals and achieving these goals as soon as possible, often involving obtaining high value items, or defeating difficult enemies.

> *Achievers are proud of their formal status in the game's built-in level hierarchy, and of how short a time they took to reach it.* (Bartle, 1995)

Explorers. Motivated to find out as much about their virtual world as possible, not just in terms of topology but also underlying design such as physics within the game.

> *Explorers are proud of their knowledge of the game's finer points, especially if new players treat them as founts of all knowledge.* (Bartle, 1995)

Socialisers. Motivated by communication with others within their virtual world, their primary focus is using the games communicative features to interact with others. This includes such actions as role-playing or simply using the game as a medium to socialise.

> *Socialisers are proud of their friendships, their contacts and their influence.* (Bartle, 1995)

Killers. Motivated through the imposition of others within their virtual world. Killers use the tools the game provides them with to cause distress to other plays, often in the form of player vs player (PvP) combat.

> *Killers are proud of their reputation and of their oft-practiced fighting skills.* (Bartle, 1995)

Bartle (2003) later expands each of these types by splitting them into implicit and explicit versions of themselves, such as “Opportunists” being

the implicit and “Planners” being the explicit “flavours” of the Achiever Player Type.

2.4.2 Yee’s Player Motivations

In his research about player motivation within the game “World of Warcraft” Nick Yee (2005) established a set of survey questions designed to identify the playstyle of different players. He argued against Bartle that players could not be confined to a single type, in order to achieve their goals players would have to partly exist within multiple types at any one point. He rejects Bartle’s (1995) assumptions that motivations suppress each other, just because a player is more of an achiever does not make him less of a socializer. Players are not character sheets with a finite amount of points to allocate to certain areas of play, as Yee jokes “just because you like ice-cream doesn’t mean you will hate pasta”. If a player was motivated to kill a particularly difficult boss that was impossible to kill on their own, that player would be forced to join a group to achieve their goal. Often in MMO’s people who fall within Bartles ‘Achiever’ Player type would be forced to join a group and socialise if they hoped to complete content, MMO’s are designed with this in mind. Taking “World of Warcraft” as an example, much of the game revolves around preparing and completing different ‘Raids’ which are areas comprising multiple ‘Bosses’ designed for groups of 10-30 people to defeat.

Therefore Yee (2005) suggests a different categorization system comprising 3 main components (Achievement, Social, Immersion), each with multiple subcomponents. This can be seen in the table below:

Achievement	Social	Immersion
Advancement Progress, Power, Accumulation, Status	**Socializing** Casual Chat, Helping Others, Making Friends	**Discovery** Exploration, Lore, Finding Hidden Things
Mechanics Numbers, Optimization, Templating, Analysis	**Relationship** Personal, Self-Disclosure, Find and Give Support	**Role-Playing** Storyline, Character History, Roles, Fantasy
Competition Challenging Others, Provocation, Domination	**Teamwork** Collaboration, Groups, Group Achievement	**Customization** Appearances, Accessories, Style, Colour Schemes
		Escapism Relax, Escape from RL, Avoid RL Problems

Table 1: Table showing the structure of Yee's motivation driven player types, placing the many different sub components under their 3 main component headings.

Under each subcomponent is what the player would value highly if they scored highly within that subcomponent, however scoring low in a particular subcomponent is just as revealing. An example used by Yee is:

> *A player who scores low in the Socializing subcomponent would prefer game mechanics that don't force them to interact with others (i.e., character dependencies in EQ - binds, teleports, rezzes). (pp. 6)*

Rather than looking at the avatar's features specifically Yee used the survey to examine the motivations behind why a player chooses a certain

‘class’ to play. Specifically he was able to determine which races/classes within “World of Warcraft” were more played by each gender and using his components make educated assumptions as to why this might be. He states that males scored much higher in the achievement subcomponent, whereas females scored much higher in the relationship subcomponent. By comparing these results against the results from grouping by races and grouping from class he was able to make educated assumptions as to motivations behind each choice. An example being the players most interested in socialising typically choose the ‘priest’ or ‘paladin’ classes, the reasoning likely being that both were support classes that often needed to rely on grouping with others to achieve their goals. This is then backed up by ‘priest’ scoring the highest of all classes within the ‘teamwork’ subcomponent (Yee, 2005). In addition his results identified a gender divide wherein female players were more likely to choose the races they perceived as ‘cuter’ such as ‘gnome’ or ‘night elf’. This was most clearly seen when looking at the ‘night elf’ race, where he found 34% of women typically choose the race, compared to the 21% of men (Yee, 2005).

2.4.2.1 Component Summaries

As this research's survey was not focused on ‘World of Warcraft’ and intended to be on a much smaller scale it did not require the level of detail Yee’s did, therefore a slightly modified version of his original survey was

used, still utilizing his established components and subcomponents of playstyle outlined below.

The Achievement Component

Advancement. Similar to Bartle's original Achievement Player Type, players who score highly in Advancement are motivated by setting and achieving goals. They enjoy constant progress and strive to become as powerful as possible. However unlike the Achievement Player Type this power can be through all aspects of the game such as social recognition or financial superiority. Players who score the highest within this subcomponent are typically those focusing on high end content, requiring them to be part of a 'guild' or group of people dedicated to achieving similar goals.

Mechanics. The mechanics subcomponent focuses on deriving a deeper understanding of the game's mechanics, such as the underlying numerical mechanics used in all current MMOs. Players who score highly within this subcomponent draw satisfaction from analysing these mechanics in order to excel within a particular aspect of the game. An example of this would be researching what specific stat weightings effect what abilities to use in what rotation, in order to output the most damage possible.

Competition. Similar to Bartle's Killer Player Type, players who score highly in the competition subcomponent derive satisfaction by competing

against other players. However unlike the Killer Player Type this involves much more than inhibiting others. Although fighting against other players is a large aspect of competition, the subcomponent also includes economical supremacy, simply completing content faster than other players, as well as scamming or griefing others. Players who score highly within this subcomponent typically enjoy having power over other players.

The Social Component

Socializing. Similar to Bartles Socialiser Player Type, players who score highly within the Socialising subcomponent are motivated by meeting and talking to others within the game. They enjoying playing purely for the sake of interacting with others and typically derive satisfaction by helping others rather than their own progression. Players who score the highest in this subcomponent are typically more casual players and as such are drawn to more casual, social based guilds.

Relationship. The relationship subcomponent is similar to Socialising however people who score highly within it are looking for deeper, more meaningful relationships. They view the game as an opportunity to make long lasting relationships with other players and often have no qualms in sharing personal details about themselves with their online friends. They will often look to the game and the friends within it as emotional support to help them deal with real life issues.

Teamwork. Players who score highly in the Teamwork subcomponent enjoy collaborating with other players to achieve their goals. They shy away from solo content and find enjoyment in group based activities over personal achievement. Conversely players who score poorly within this subcomponent prefer not to rely on others and only group when it is necessary. They would rather solo as much as possible than have to rely on others for their own achievement.

The Immersion Component

Discovery. Similar to Bartle's Explorer Player Type, the discovery subcomponent focuses on the exploration of the game world. Players who score highly within this subcomponent derive satisfaction in discovering aspects of the game (Such as locations or artifacts) that were unknown to other players. They enjoy exploring for the sake of experiencing the game world and discovering everything is has to offer.

Role-Playing. The Role Playing subcomponent refers to the act of role-playing within a game world. Players who score highly within this subcomponent enjoy fully immersing themselves within all aspects of the game world by placing themselves within the character they create. They typically create elaborate backstories for their character and become immersed with the games many storylines, integrating their deeds into their ever evolving backstories.

Customization. The Customization subcomponent refers to the enjoyment derived from customising a player's character appearance. Therefore players who score highly within this subcomponent value being able to make a character that is unique to them, with as many avatar customisation choices as possible.

Escapism. The escapism subcomponent involves using the game world as an escape from the real world, whether this be just to relax, or to avoid problems. Players who score highly within this subcomponent typically will try to immerse themselves into the game world as a way to avoid thinking about real life.

2.5 Summary

This thesis is concerned with the level of influence visual characteristics of the player avatar has over the motivations of the player. By using Frasca's definition of play we can identify it as an activity the player believes to have active participation within and believing it contains here immediate future. According to Leont'ev's 'Activity Hierarchy' we can view this activity as a chain of actions conducted by the player, created by that player's motivations.

Motivations are generated through and influenced by the players values, within the context of the game world (Barr, 2008). However these values can be influenced and changed resulting in changes in behaviour (Conroy, 1976; in Rokeach, 1979). Therefore by modifying a player's values we can to some extent influence their interactions, furthermore the values of the

video game itself contribute (Barr, 2008). This subtle influence is then reinforced by video games through the use of operant conditioning, made more effective by how immersed the player is within the game.

In order to fully immerse the player within the video game the player must be impacted on an emotional level (Murray, 1997). They must feel as though they are part of the game world to the extent that any action that may cause the player to be removed from the situated point of view of the character would raise important moral questions for the player. Games that excel at this are role playing games (Waggoner, 2009) which use the act of role play to deepen the player's immersion by presenting them with avatars. Avatars being customisable virtual entities created by the player acting as their representation within the video game (Waggoner, 2009). Players experiment with their identity, behaviour, and values through virtual avatars as physical appearance cues are unavailable (Reid, 1995). As Gee (2003) explains the values of the avatar do not necessarily match the values of the player since there is a third identity at play. With the addition of the projective identity it is possible for the avatar to become more than just the player's virtual representation, incorporating its own values and behaviour separate to that of the player.

Finally the chapter covered how to combine the previous sections into a means to differentiate players by means of categorizing the motivations behind the different values influencing each player's playstyle. To achieve this the chapter provided a brief overview of Bartle's (1995) 'Player Types' before examining Yee's (2005) 'Player Motivations'. Although both systems seem similar in that the goal of both is to produce a means to

objectively compare players, the less rigid structure of Yee's (2005) 'Player Motivations' however makes it more suitable for the purposes of this research. Therefore the following chapter will explore how to effectively utilize 'Player Motivations' in the creation of an online Survey, designed to compare the aesthetic features of a group of player avatars against their perceived playstyle.

Chapter 3: The Survey

This chapter aims to establish a way to find any common correlations between a player's avatar and the way in which that player plays the game. It draws on evidence collected via online survey from a number of online communities, which operate within the video game genre of Massively Multiplayer Online Games (MMOs).

3.2 Methodology

By cross referencing the individual results within an online survey with player motivations we can begin to see any correlations between the player's chosen avatar and their current motivations. In an ideal situation we would use a large scale observational study, however the feasibility of monitoring a large number of people over a large span of time meant we had to find an alternative.

> *An alternative approach might simply be to ask the players what they themselves like about a particular MUD: even a short questionnaire, completed anonymously, can give a fair indication of what players find enjoyable* (Emert, 1993).

By first finding any correlations within this survey, we can see any overarching correlations that may exist and use this data to help focus a small scale observation study. In order to gain the most accurate data in

regards to a participant's heavily used avatar, the choice was made to focus mainly on MMOs as they are most likely to of received the largest time investment. The survey included two popular single player games famed for their immersive nature; ‘Skyrim’ and ‘Oblivion’. The majority of their participants stated that they played both these games for a few months at most, as they would eventually run out of content. The constantly evolving state of MMOs however means that there is always more content for the player to complete, resulting in the average age of avatars within them to be much older. To illustrate this an optional question was added to the survey questioning the current lifespan of the participant’s avatar. As the table below shows, the vast majority of avatars within the MMOs surveyed at at least a year old.

More than a year	Between 6 months and a year	Between 3 and 6 months	Between 1 and 3 months	Less than a month
889	168	113	162	67

Table 2: Table showing results from the MMO version of the survey question “How old is your character”

In addition, the nature of MMOs forces the player to select a specific role to fill within a teamwork situation. These roles could also be recorded and compared to graphical avatar features to identify any potential correlations relating to role choice.

3.3 General Results

The purpose of the survey was to attempt to identify any correlations between character customisation and play style. With this in mind it was loosely based on the survey created by Nick Yee (2005), utilizing his subcomponents outlined above. We used these subcomponents to create measures of motivation corresponding closely to Yee's results. The achievement scales reliability was (a = .85), social was (a = .81), followed by immersion (a = .87).

Sub Components	Cronbach's Alpha
Achievement Sub Component	
Advancement	0.75
Mechanics	0.74
Competition	0.64
Overall	**0.85**
Social Sub Component	
Socializing	0.75
Relationships	0.79
Teamwork	0.32
Overall	**0.81**
Immersion Sub Component	
Discovery	0.81
Roleplaying	0.81
Customisation	0.68
Escapism	0.80
Overall	**0.87**
Survey Overall Total	**0.88**

Table 3: Table showing survey subcomponent variable alpha scores

In addition it required the respondent to give details of the game character they played the most, such as the character's race and gender so that they could be grouped accordingly. The survey consisted of 50 questions, 5 falling under each sub component. The respondents were asked to rate each question on a likert scale, such as:

I frequently logon just to hang out online.

- *Never*
- *Not Often*
- *Sometimes*
- *Quite Often*
- *All the time*

The responses were then graded 1-5 (1 being the lowest value on the scale) and combined in the subcomponent groups to produce an overall score for each subcomponent. These values were then set against the respondents overall score to determine the level of motivation they exhibit in each component. Finally the values were converted to percentage scores to better compare against other respondents. By averaging grouped respondents overall score based on character model similarities we can identify trends that may exist (i.e. averaging the scores for all respondents with larger character models we may see a difference to the scores from respondents with smaller character models).

The survey was posted on the main community websites for 11 different popular role playing games with varied responses. The total participation distribution can be seen in the figure below.

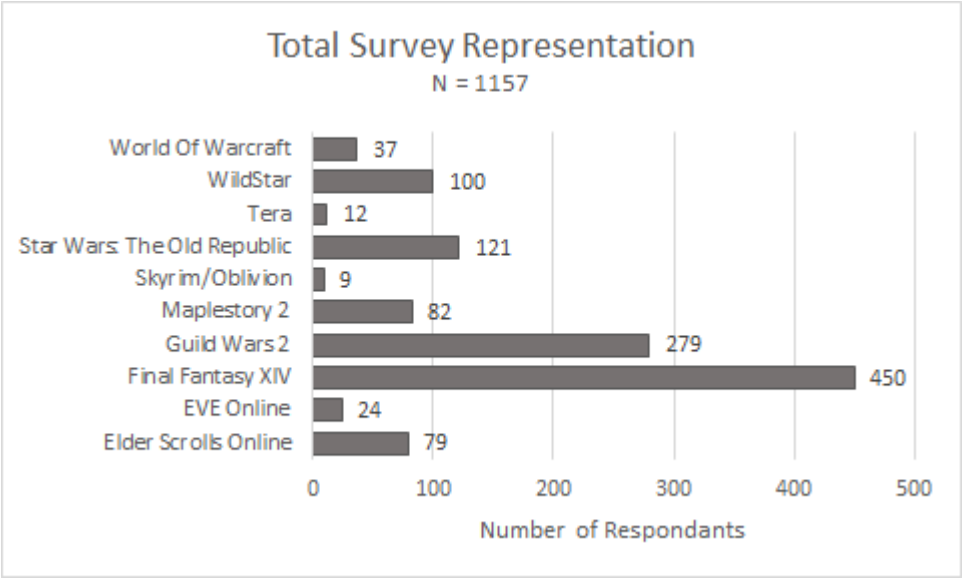

Figure 3: Chart showing survey responses broken down into game representation

As the difference in responses between games is so great, in order to get the most accurate data regarding the correlation between avatar and play style will focus on results from a single game. As figure 3 shows the game with the highest survey participation was *"Final Fantasy XIV"* with a total of 450 participants. Therefore we decided to focus primarily on the character data within this game, as it provides us with the most quantitative data.

3.3.1 Setting: Final Fantasy XIV

Final Fantasy XIV is a 'Massively Multiplayer Online Role Playing Game' (MMORPG) in which the player controls a customized avatar within an immersive and persistent game world. This game world is comprised of a wide variety of immense play environments powered by a powerful graphics engine which make the game world seem virtually real. The player creates this avatar by firstly selecting from one of the game's six

playable races each with unique male and female character models. Once race and gender have been selected the avatar can then be customised by selecting from a vast collection of features such as height, weight, eye and hair colour, skin tone, facial markings, and many more.

Once created the player controls their customised avatar in order to interact with the game world, using it as a visual representation of the character-self, be it themselves or a persona they wish to inhabit. As with most MMORPGs Final Fantasy XIV offers a wide variety of objectives to strive for. These include quests given by non-player characters or dungeons to complete, by doing so the player will gain experience points in order to advance in levels and become more powerful. The game also includes rich environments to explore and a detailed social system which makes use of many chat features and a multitude of character gestures so players can better communicate with each other. As a result Final Fantasy XIV is currently one of the most popular MMORPGs available, making it one of the largest virtual communities in the world.

3.3.2 Class Structure and Representation

The class system was originally designed in the first established role playing game *“Dungeons & Dragons”*, and has subsequently been adopted by a vast variety of role playing games; Final Fantasy XIV included. The class system itself is a way to create diversity of characters within the player base by forcing the player to choose from a variety of unique classes for their character. The players chosen class will determine

the capability of that character by aggregating class specific abilities to them as they increase in levels. By tailoring these abilities to specialise in a certain area (i.e. keeping the player and their allies alive) the game can make content designed to be played through within a group, with each of these groups requiring a certain degree of class diversity to function properly.

Final Fantasy Class System

The class system created and used by Final Fantasy XIV (FFXIV) differs slightly from other popular MMORPGs. The game currently has a total of 13 combat classes, each with its own unique abilities and playstyle. However unlike many other popular MMORPGs FFXIV does not lock a character into just playing a single class, instead allowing them to swap between classes by simply equipping a weapon associated with the corresponding class. Furthermore the game actively encourages the player to play many different classes, allowing them to carry certain skills they acquire on other classes over to other classes. By allowing a single character to level as many of the 13 different classes as they please, FFXIV allows the player to maintain a single avatar within the game reality. Whereas it is common in other popular MMORPGs for one player to have many different characters in order to play the different classes, FFXIV allows the player to exist as a single virtual identity within the game world.

Survey Class Representation

The table below contains the FFXIV survey participants distributed into gender of character and grouped within the games 13 classes.

FFXIV Classes	Male	Female	Overall
Astrologian	9	17	26
Bard	18	21	39
Black Mage	16	19	35
*Crafter**	*0*	*3*	*3*
Dark Knight	11	11	22
Dragoon	13	18	31
Machinist	3	4	7
Monk	18	23	41
*Multiple**	*10*	*11*	*21*
Ninja	5	7	12
Paladin	18	12	30
Scholar	16	29	45
Summoner	14	18	32
*Unknown**	*0*	*3*	*3*
Warrior	21	19	40
White Mage	22	41	63

(either not a combat role, or participant put multiple classes/no classes as their response)*

Table 4: Table showing FFXIV survey results broken down into class representation

However as the classes used by FFXIV are not universal for all role playing games, and the relatively low group size of each class as a result from the large number of available classes; the decision was made to group similar classes together. Each class was analysed and grouped depending on what role they filled within the common group dynamic utilized by most RPGs.

Classes into Roles

In order to evaluate the classes in a manner that can then be translated to other games, they have been grouped into the role that that class would fulfil in group play. The classes were grouped under the 4 new ‘roles’ of Healer, Melee Damage Dealer, Ranged Damage Dealer, and Tank.

Healer

The role of healer consists of classes that specialise in defence, they are lightly armoured and need to avoid taking damage by remaining at ranged and using their abilities to heal themselves and their allies.

Melee Damage Dealer

The role of Melee Damage Dealer consists of classes that specialise in offence, they are moderately armoured and need to avoid as much damage as possible though have little to no ranged abilities so have to remain in melee range of their target to damage it.

Ranged Damage Dealer

The role of Ranged Damage Dealer consists of classes that specialise in offence, they are lightly armoured and need to avoid getting hit by using ranged attacks to damage their target.

Tank

The role of a Tank consists of classes that specialise in defence, they are heavily armoured and use their abilities to taunt the target/s into attacking them rather than their lesser armoured allies.

Healer	Melee Damage Dealer	Ranged Damage Dealer	Tank
Astrologian	Dragoon	Bard	Dark Knight
Scholar	Monk	Black Mage	Paladin
White Mage	Ninja	Machinist	Warrior
		Summoner	

Table 5: The many combat classes grouped within their respective roles

Table 5, shown above contains the original 13 classes available to be played in FFXIV placed within their new role groups. Once the new role groups were applied to the original class representation data we could establish the overall FFXIV role representation, which is displayed in the graph below.

FFXIV Roles	Male	Female	Overall
Healer	47	87	134
Melee Damage Dealer	36	48	84
Ranged Damage Dealer	51	62	113
Tank	50	42	92
Multiple Roles	10	11	21
Unknown	0	3	3

Table 6: Table showing the results for FFXIV role representation

As the results show the largest demographic of participants within the survey prefer the role of Healer, with ranged Damage Dealer a close second. The combat role with the smallest representation is Melee Damage Dealer, with the remaining role of Tank taking the third place.

3.4 Character Race Results

One of the larger character customisation options the player is presented with during the character creation process is the choice of character race. FFXIV offers a range of six playable races to choose from, each with their own range of unique features. In addition each race has a further two variations that very slightly change the appearance of the base race model. An example of this is:

> **Lalafell Plainsfolk:** Distinct difference in hair colour, much larger range of earthy and grassy tones. Their ears are larger and more pointed and their skin tones are commonly fairer.
>
> **Lalafell Dunesfolk:** Difference in eye customisation, commonly glossy and pearlised opposed to clearly defined iris/pupil. Common to include a small gemstone on their forehead. Finally Dunesfolk have a large range of skin tones, though unlike Plainsfolk they tend toward the darker side of the spectrum

This extra choice provides a small increase in variation within the race population. However it is possible to create the same final appearance regardless of this choice (i.e. Possible to make a Plainsfolk with the

features of a Dunesfolk) so it could be argued that it is largely just an attempt the game makes to increase the immersion factor by enforcing an element of role play within the character creation process. In addition it is possible to simply not use the features that would identify a character as a member of either sub-race (i.e. not use a gemstone on the character's forehead as a Dunesfolk). Therefore as the choice in many player's character creation process is largely inconsequential, for the purpose of this study we will use the overarching races, without distinguishing between the additional variations within each race.

Race	Male	Female	Total
Au Ra	34	82	116
Elezen	22	9	31
Lalafell	29	29	58
Miqo’te	45	82	127
Hyur	40	21	61
Roegadyn	11	11	21

Table 7: FFXIV character race survey representation

In order to further evaluate the results 3 races were chosen for further analysis. As the study is focused on playstyle in regards to player avatar, the races chosen were the largest character models (Roegadyn), the smallest character models (Lalafell), and the largest difference between male and female character models (Au Ra).

Au Ra	Lalafell	Roegadyn

		
Average Height		
Male: 217cm	**Male:** 97cm	**Male:** 230cm
Female: 146cm	**Female:** 87cm	**Female:** 217cm

Table 8: Side by Side comparison of the 3 FFXIV chosen for focused study

3.4.1 Race Focus: Au Ra

At the time of this study the race of Au Ra had just been released, as such many of the participants stated that they had only recently changed the race of their existing character over to Au Ra. In addition to the large sample size the race was chosen for further examination because of the large difference between the male and female character models. The male Au Ra are currently the second largest character model, while the female Au Ra are currently the second smallest character model in game. As this is the race with the largest aesthetic difference between male and female, it should have a large difference in playstyle results. The male and female models do share features and are aesthetically similar outside of this size

difference, therefore any difference in playstyle could be due in part to this size differential.

Race	Male	Female	Total
Healer	5	22	27
Melee Damage Dealer	10	19	29
Multiple Roles	2	4	6
Ranged Damage Dealer	4	24	28
Tank	13	13	26
Unknown	0	0	0

Table 9: FFXIV character race Au Ra role representation

Au Ra was one of the larger participant groups within the FFXIV Survey group. Overall the group is a fairly even in terms of roles, however the gender ratio is 34 males (29.3% Male) to 82 females (70.7% Female).

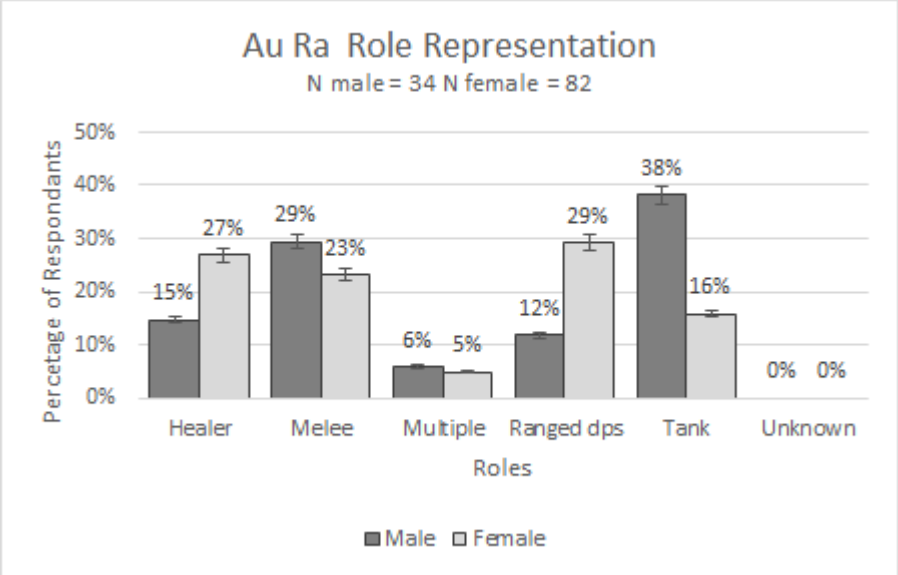

Figure 4: FFXIV character race Au Ra gender role representation

The difference in roles selected by Male and Female Au Ra can be seen above. It appears that male Au Ra tend to choose either the Tank (38%) or Melee Damage Dealer (29%) roles far more than the others. Female Au Ra tend to choose Ranged Damage Dealer (28%) or Healers (27%), however they also have Melee Damage Dealer (23%) at a close third. Therefore male Au Ra seem to trend towards playing melee roles, as 67% of the male Au Ra participants already identify as either a Melee Damage Dealer or Tank. The female Au Ra seem much more diverse in roles with a fairly even spread across all roles excluding tanks which is roughly half the population of all other roles. This would seem to indicate that female Au Ra slightly prefer ranged roles, as 56% of the female Au Ra participants consider themselves either Ranged Damage Dealer or healers.

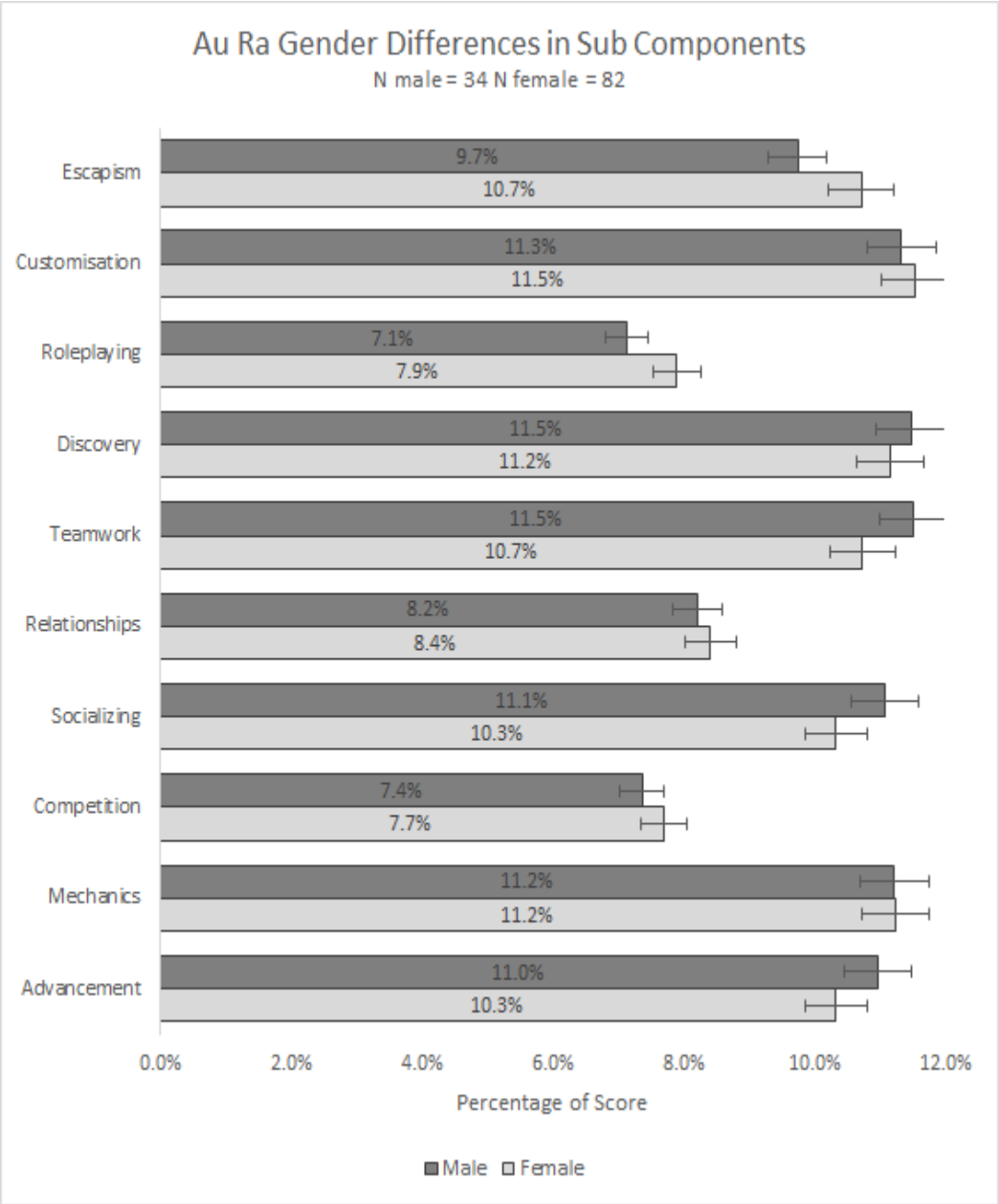

Figure 5: Percentage sub component scores from the Au Ra race within the Final Fantasy XIV survey, separated by gender

As Figure 5 shows male Au Ra scored highest in the Discovery (11.5%) and Teamwork (11.5%) subcomponents, while scoring lowest in the Roleplaying (7.1%) subcomponent. Female Au Ra scored highest in the Customisation (11.5%) and lowest in the Competition (7.7%) subcomponent. Male Au Ra players scored higher in the Socializing (+0.8%), and Teamworking (+0.8%) subcomponents than the female Au

Ra players, while female Au Ra scored higher in the Escapism (+1.0%) subcomponent. The results seem to follow a similar trend across both genders fairly consistently over all subcomponents with Escapism (Male 9.7% / Female 10.7%) being the largest discrepancy.

3.4.2 Race Focus: Lalafell

At the time of this study ‘Lalafell’ is the smallest playable race in FFXIV, they are also the least humanoid in nature. Their aesthetic is radically different from the other races within FFXIV, appearing far more child-like than any of their counterparts. This difference in conjunction with their small character model is why they were selected as one of the three races for further examination.

Race	Male	Female	Total
Healer	9	19	28
Melee Damage Dealer	6	1	7
Multiple Roles	1	0	1
Ranged Damage Dealer	11	5	16
Tank	2	3	5
Unknown	0	1	1

Table 10: FFXIV character race Lalafell role representation

Lalafell was one of the smaller participant groups within the FFXIV Survey group, however they are one of the groups that does not contain an option for 'average height' as both the male and female are equally small. Overall

the role distribution is far less spread than Au Ra with 75% of all Lalafell participants choosing either the Healer or Ranged Damage Dealer role. However the gender ratio is far more even than Au Ra with 29 males (50% Male) to 29 females (50% Female).

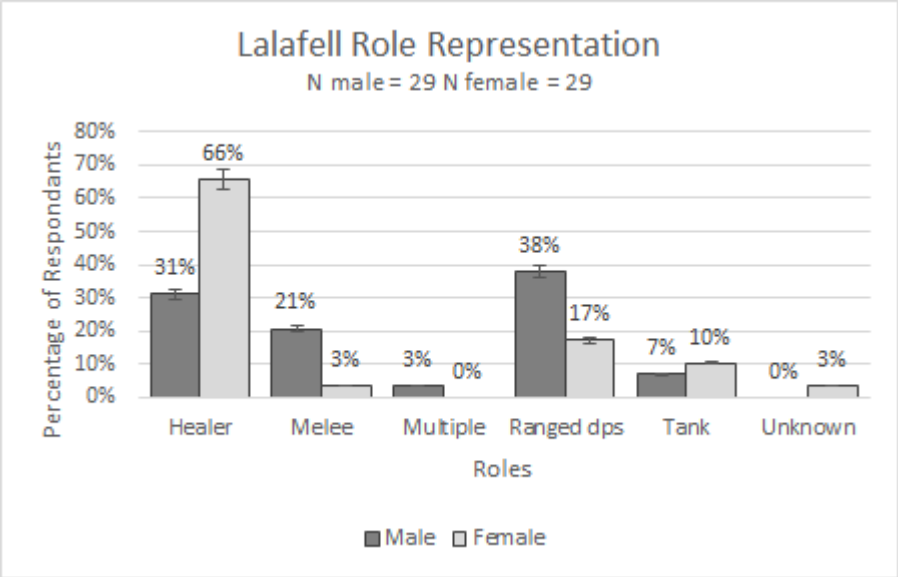

Figure 6: FFXIV character race Lalafell gender role representation

The difference in roles selected by Male and Female Lalafell can be seen above. It appears that male Lalafell tend to choose either the Ranged Damage Dealer (38%) or Healer (31%) roles far more than the others. By a large margin female Lalafell tend to choose Healers (66%).
Therefore both male and female Lalafell trend towards playing ranged roles, with considerably more males choosing the Ranged Damage Dealer route in total 69% of the male Lalafell chose a ranged role. The female Lalafell seem even less diverse in roles than the males with 66% belonging to a single role. In total 83% of female Lalafell chose ranged roles.

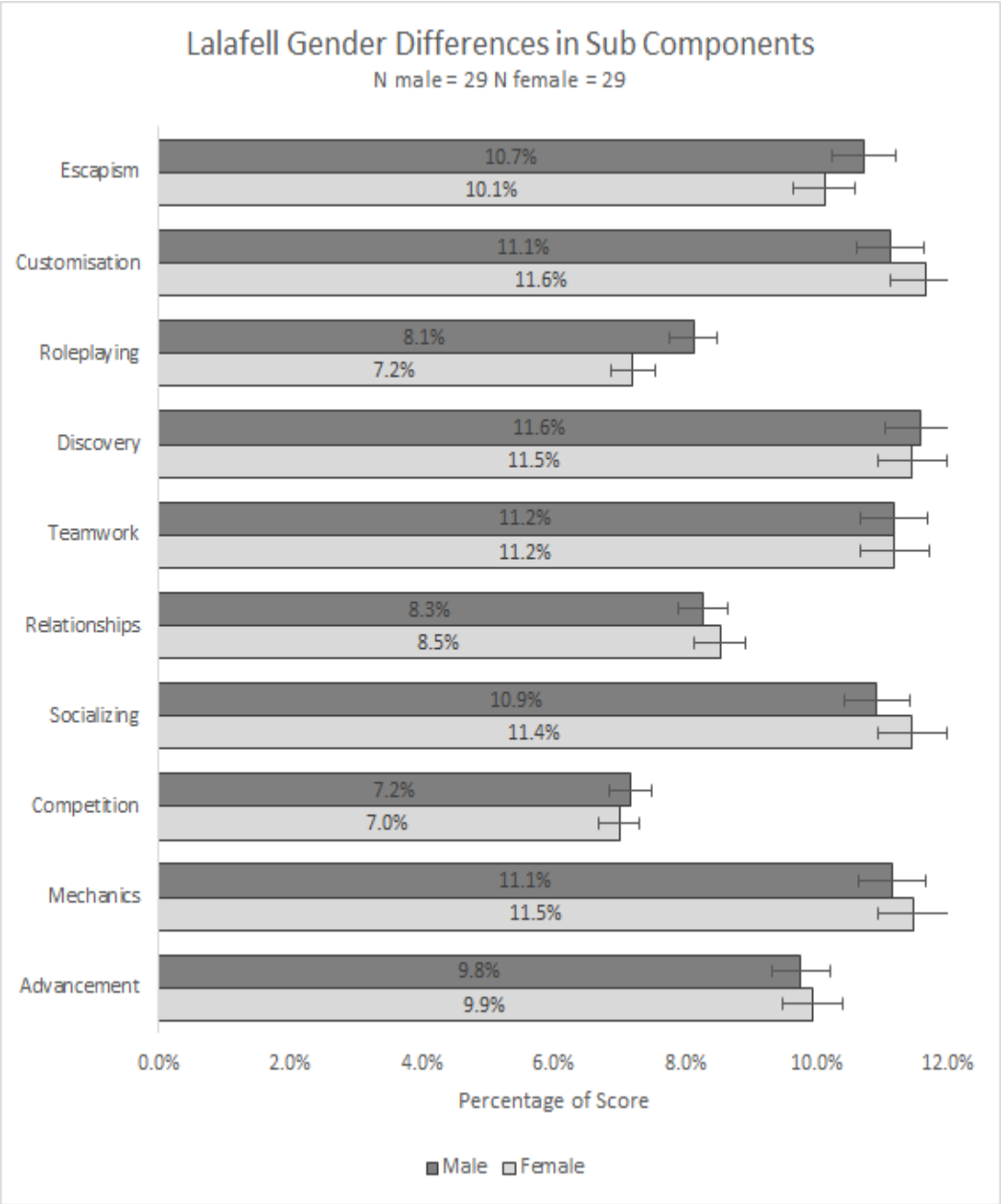

Figure 7: Subcomponent scores from the Lalafell race within the Final Fantasy XIV survey, separated by gender

As Figure 7 shows male Lalafell scored highest in the Discovery (11.6%) subcomponent, while scoring lowest in the Competition (7.0%) subcomponent. Female Lalafell scored highest in the Customisation (11.6%) and lowest in the Competition (7.0%) subcomponent. Male Lalafell players scored higher in the Roleplaying (+0.9%) subcomponent than the female Lalafell players, while female Lalafell scored higher in the

Socializing (+0.5%) and Customisation (+0.5%) subcomponent. As with the Au Ra the results seem to follow a similar trend across both genders fairly consistently over all subcomponents, with Roleplaying (Male 8.1% / Female 7.2%) being the largest discrepancy. Lalafell seem slightly more even across genders. This could support the survey's purpose, as the difference in aesthetics between male and female Lalafell is far less than that of Au Ra.

3.4.3 Race Focus: Roegadyn

At the time of this study ‘Roegadyn’ is the physically largest playable race in FFXIV. Similar to Lalafell but at the opposing end of the scale their aesthetic is different from the other races within FFXIV (See table 11 below). While still being humanoid in nature, they are far more muscular and broad than any of their counterparts. This difference in conjunction with their large character model is why they were selected as one of the three races for further examination.

Race	Male	Female	Total
Healer	2	1	3
Melee Damage Dealer	1	4	5
Multiple Roles	1	1	2
Ranged Damage Dealer	1	1	2
Tank	6	3	9
Unknown	0	1	1

Table 11: FFXIV character race Roegadyn role representation

As the table above shows, Roegadyn was the smallest of the participant groups within the FFXIV Survey group with a gender ratio of 11 males (50% Male) to 11 females (50% Female).

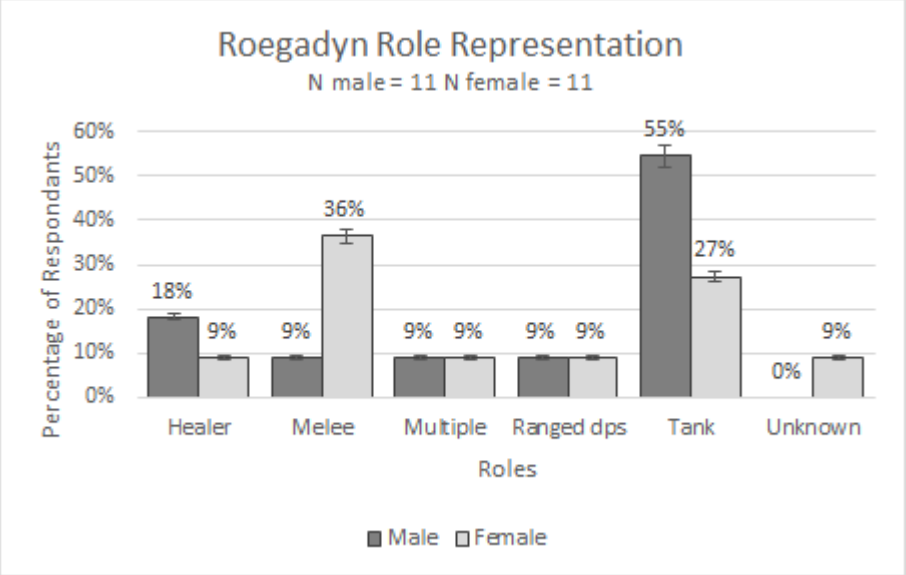

Figure 8: FFXIV character race Roegadyn gender role representation

The difference in roles selected by Male and Female Roegadyn can be seen above. It appears that male Roegadyn prefer the roles of Tank (55%) or Healer (18%). Similarly female Roegadyn tend to also choose the role of Tank (27%) though they swap the males Healer role for the role of Melee Damage Dealer (36%).

The small sample size has to be considered when examining the largest race in FFXIV, the sample size is less than half that of the Lalafell and less than a quarter that of Au Ra. This small sample size could produce warped results however as Roegadyn are currently the largest race across

both genders and therefore their character data is potentially some of the most relevant. Although male Roegadyn prefer tanking by a large margin, the results show that they trend towards playing both ranged and melee roles equally. The female Roegadyn are largely split equally between both melee roles of Tank and Melee Damage Dealer. Resulting in 61% of the female Roegadyn playing melee roles, with a further 9% stating that they either play too many roles, or that they were currently unsure (Usually the newer players, unsure about what they will play in the future).

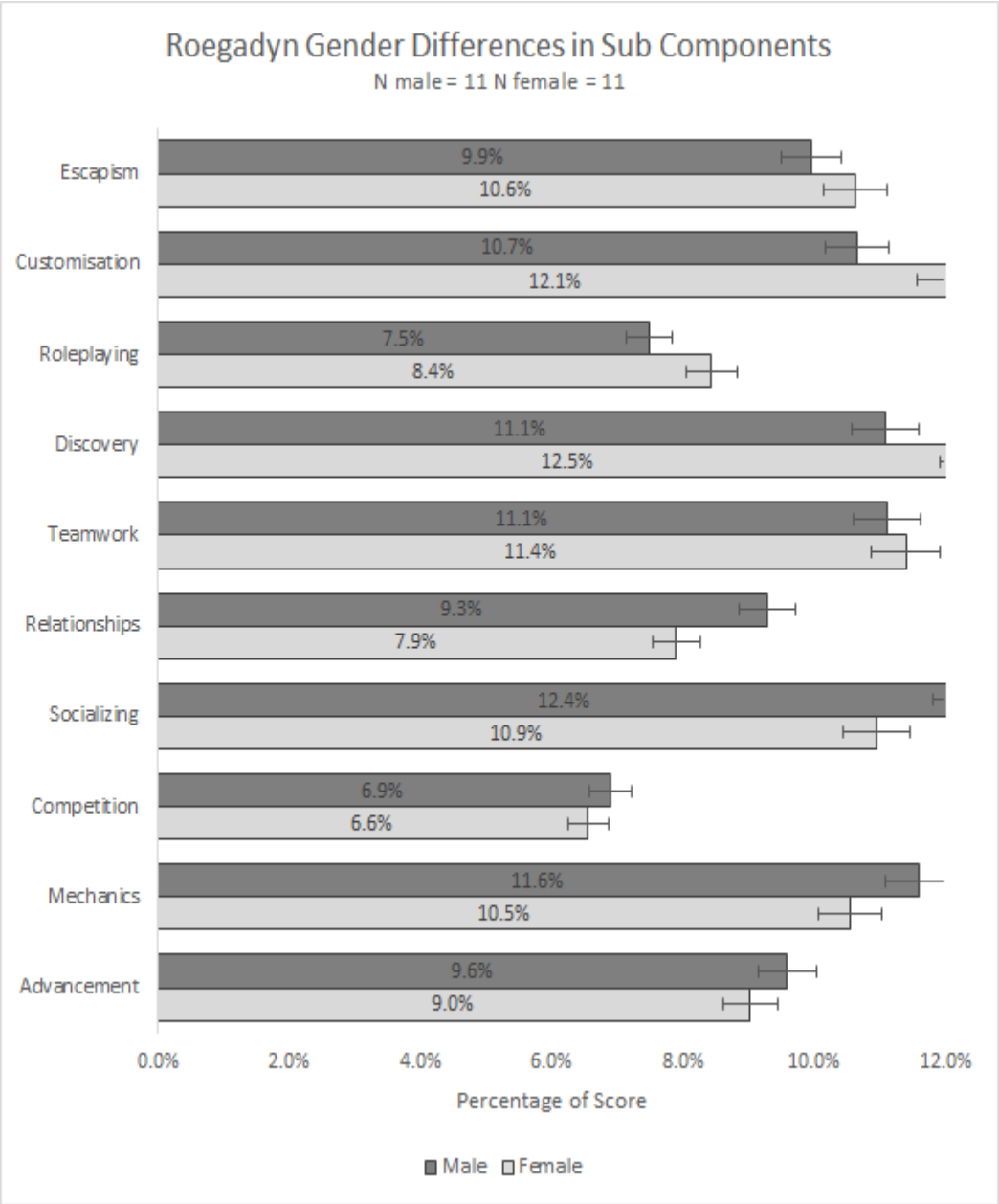

Figure 9: Subcomponent scores from the Roegadyn race within the Final Fantasy XIV survey, separated by gender

As Figure 9 shows male Roegadyn scored highest in the Socializing (12.4%) subcomponent, while scoring lowest in the Competition (6.9%) subcomponent. Female Roegadyn scored highest in the Customisation (12.1%) and lowest in the Competition (6.6%) subcomponent. Male Roegadyn players scored higher in the Socializing (+1.5%) subcomponent

than the female Roegadyn players, while female Roegadyn scored higher in the Discovery (+1.4%) and Customisation (+1.4%) subcomponent. Unlike both the Au Ra and Lalafell the results do not seem to follow the similar trend across both genders, instead being more random over all subcomponents as shown by the increased discrepancies between Socializing (Male 12.4% / Female 10.9%), Discovery (Male 11.1% / Female 12.5%), and Customisation (Male 10.7% / Female 12.1%) subcomponents.

3.4.4 Focus Race Comparison

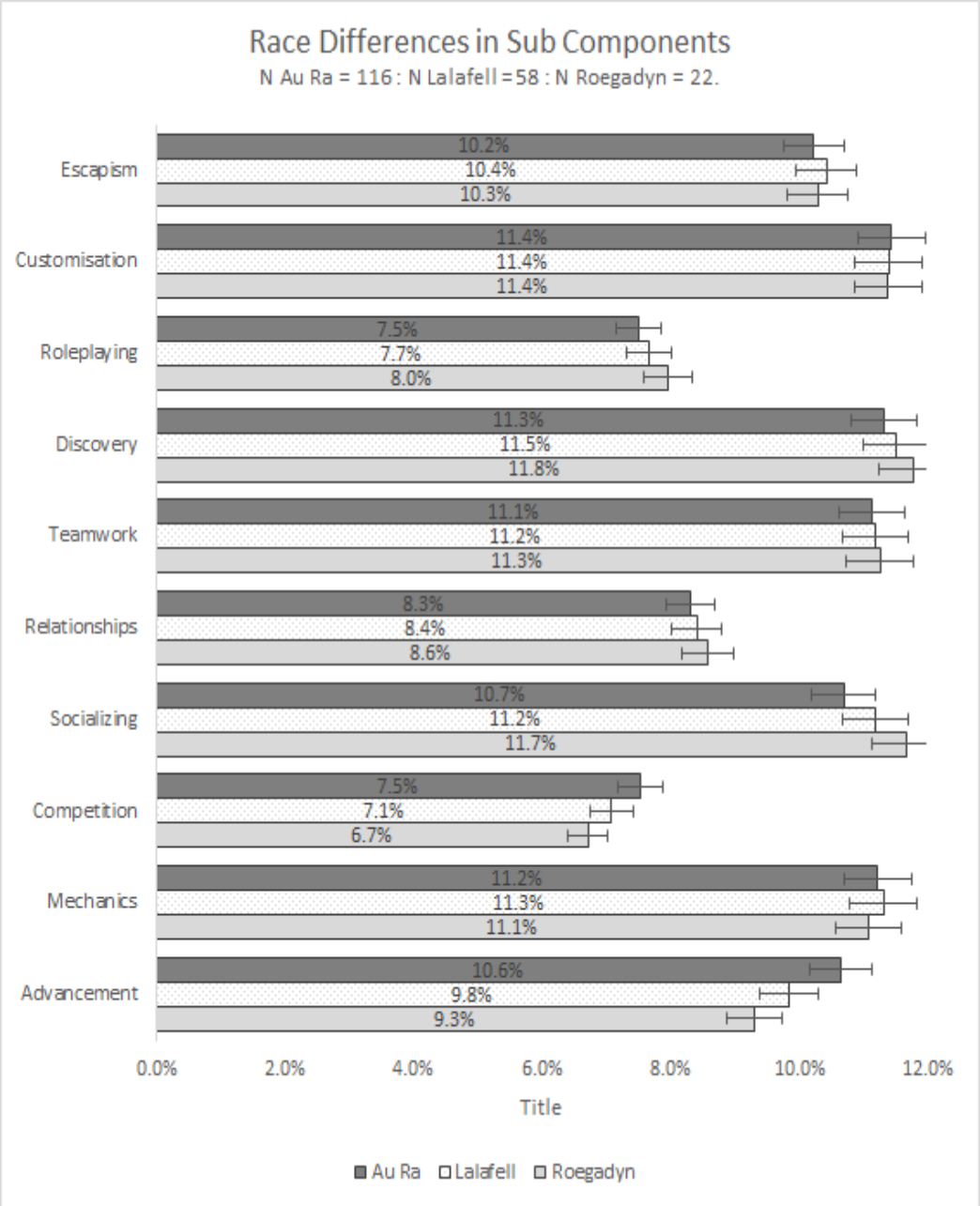

Figure 10: Subcomponent scores from the three focused races Au Ra, Lalafell, and Roegadyn within the Final Fantasy XIV survey, separated by race

As Figure 10 shows male Au Ra scored highest in the Customisation (11.4%) subcomponent, while scoring lowest in the Competition (7.5%) and Roleplaying (7.5%) subcomponents. Au Ra players scored the highest

of the focused races in the Advancement (Lalafell +0.8% / Roegadyn +1.3%) and Competition (Lalafell +0.4% / Roegadyn +0.8%) subcomponents, while scoring the lowest in the Socializing (Lalafell -0.5% / Roegadyn -1.0%), Roleplaying (Lalafell -0.2% / Roegadyn -0.5%), and Escapism (Lalafell -0.2% / Roegadyn -0.1%) subcomponents. If we refer back to the component groups these results would seem to indicate that Au Ra players were the most motivated by the 'Achievement' component out of the focused races, while being the race least motivated by both the 'Social' and 'Immersion' components.

Lalafell scored highest in the Discovery (11.5%) subcomponent and lowest in the Competition (7.1%) subcomponent. Lalafell players scored the highest of the focused races in the Escapism (Au Ra +0.2% / Roegadyn +0.1%) and Mechanics (Au Ra +0.1% / Roegadyn +0.2%) subcomponents, while scoring the lowest in no subcomponents. If we refer back to the component groups these results would seem to indicate that Lalafell players motives are spread across all components, leaning towards the 'Immersion' component.

Roegadyn scored highest in the Socializing (11.7%) subcomponent and lowest in the Competition (6.7%) subcomponent. Roegadyn players scored the highest of the focus races in the Socializing (Au Ra +1.0% / Lalafell +0.5%), Relationships (Au Ra +0.3% / Lalafell +0.2%), Teamwork (Au Ra +0.2% / Lalafell +0.1%), Discovery (Au Ra +0.5% / Lalafell +0.3%), and Roleplaying (Au Ra +0.5% / Lalafell +0.3%) subcomponents, while scoring the lowest in the Advancement (Au Ra -1.3% / Lalafell -0.5%),

Mechanics (Au Ra -0.1% / Lalafell -0.2%), and Competition (Au Ra -0.8% / Lalafell -0.4%) subcomponents. If we refer back to the component groups these results would seem to indicate that Roegadyn players were the most motivated by the ‘Social’ and ‘Immersion’ components out of the focused races, while being the race least motivated by the ‘Achievement’ component.

3.5 Limitations of Survey

As the survey was advertised on the highly populated community website connected to Final Fantasy XIV the responses are limited to those players who both frequent the website and those who were inclined to respond to the survey. As there are limited ways to obtain respondents outside of going through a third party medium the study is forced to assume that the community of reddit.com/r/ffxiv represents the overall population of Final Fantasy XIV. The possibility exists that players who play a certain class are more inclined to both frequent the website and respond to an academic survey. However without accurate population data in combination with a means to make the entire player population both aware of the survey and willing to participate this is an unavoidable variable.

The exact number of active players within Final Fantasy XIV is not currently public information. It was announced in July 2015 at the ‘Japan Expo’ that during its then 21 month lifespan the game had amassed 5 million paid subscriptions, however this does not equal current active

subscribers. Current estimates based on both this announcement and the most recently released census data places the current active subscriber count anywhere from 3 - 5 million. Using a 95% confidence interval this places the margin of error for the results at ±4.6%, although not ideal this remains within an acceptable level to accurately represent the population of Final Fantasy XIV. However due to this margin of error and the slight differences in subcomponent scores many of the smaller differences are too small to consider consequential.

3.6 Summary

Chapter 3 built upon the concepts of player type and player motivations drawing from works from both Bartle (1995) and Yee (2005). The information was refined down into a set of survey questions designed to identify the motivations behind the ‘playstyle’ of players within MMORPGs (Survey questions can be found in Appendix). These questions were organised into 10 subcomponents which group to make 3 components (Achievement / Social / Immersion), each subcomponent and their grouping is defined in the previous chapter (section 2.4.2.1). The original survey created by Yee (2005) was modified to suit the needs of the study and distributed to a total of 13 popular MMORPG communities. The game community with the overwhelmingly largest response (Final Fantasy XIV) was chosen to focus on. In addition to finding the playstyle motivations of the respondents the survey was designed to find the character race/class/gender of each of the respondents avatars.

The ‘class system’ used by MMORPGs in general was examined and explained, along with the specific class system used by Final Fantasy XIV. As the classes used in nearly all role playing games differs wildly the classes used in Final Fantasy XIV were grouped depending on their specific role within group based content. These roles being ‘Tank’, ‘Healer’, ‘Melee Damage Dealer’, and ‘Ranged Damage Dealer’ each with accompanying definitions in section 3.3.2. By grouping in this manner the results can be applied to more than just the one specific game ‘Final Fantasy XIV’, but to all games that utilize this 4 Role system, commonly found in most current MMORPGs.

Three races were chosen for examination within the responses based on their visual characteristics: the largest race (Roegadyn), the smallest race (Lalafell), and the race with the largest difference between genders (Au Ra); further details on the races can be found in section 3.4. Of these chosen races Au Ra had the largest number of respondents at 116, Roegadyn had the least at 22, and Lalafell fell between them at 58.

3.6.1 Role Results Summary

Out of Au Ra’s 116 respondents 34 were male, and 82 were female characters. The most popular role chosen by male Au Ra was ‘Tank’ (38%), the least popular was ‘Ranged Damage Dealer’ (12%). The most popular role chosen by female Au Ra was ‘Ranged Damage Dealer’ (29%), the least popular was ‘Tank’ (16%). Of Lalafells 58 respondents 29 were male, and 29 were female characters. The most popular role chosen

by male Lalafell was ‘Ranged Damage Dealer’ (38%), the least popular was ‘Tank’ (7%). The most popular role chosen by female Lalafell was ‘Healer’ (66%), the least popular was ‘Melee Damage Dealer’ (3%). This would seem to indicate that members of the smallest race in ‘Final Fantasy XIV’ prefer to stay at range while in combat as both ‘Ranged Damage Dealer’ and ‘Healer’ are ranged roles, typically with medium to low defences. Of the 22 Roegadyn respondents 11 were male, and 11 were female characters. The most popular role chosen by male Roegadyn was ‘Tank’ (55%), with all other roles in equal second (9%). The most popular role chosen by female Roegadyn was ‘Melee Damage Dealer’ (36%), the least popular were both ‘Healer’ (9%) and ‘Ranged Damage Dealer’ (9%). This would seem to indicate that members of the largest race in ‘Final Fantasy XIV’ prefer to be in melee range while in combat as both ‘Tank’ and ‘Melee Damage Dealer’ are short range roles with medium to high defences.

A clear correlation between role and character size can be seen when examining the role results. The larger model of the Au Ra male heavily prefers the short range, medium to high defence rating roles preferred by the Roegadyn race (Largest in game). In contrast the much smaller model of the Au Ra female heavily prefers the ranged medium to low defence roles preferred by the Lalafell race (Smallest in game). The results therefore indicate that the difference in character model size and appearance does influence the player when selecting a role to play.

3.6.2 Playstyle Motivation Results Summary

When comparing the three races Au Ra players were the most motivated by the ‘Achievement’ component, while being the least motivated by both the ‘Social’ and ‘Immersion’ components. Lalafell players motives were spread across all components with little focus, their highest scores appearing within the ‘Immersion’ component. Roegadyn players were the most motivated by the ‘Social’ and ‘Immersion’ components out of the focused races, while being the race least motivated by the ‘Achievement’ component.

The individual subcomponent results for Au Ra were similar for both genders across most subcomponents with the only significant differences being male Au Ra scoring higher in the Socializing (+0.8%), and Teamworking (+0.8%) subcomponent, while female Au Ra scored higher in the Escapism (+1.0%) subcomponent.

The individual subcomponent results for Lalafell were similar for both genders across most subcomponents with the only significant differences being male Lalafell scored higher in the Roleplaying (+0.9%) subcomponent, while the female Lalafell scored higher in the Socializing (+0.5%) and Customisation (+0.5%) subcomponent.

Unlike the other two races the individual subcomponent results for Roegadyn do not seem to follow the similar trend across both genders, instead being more random across most subcomponents. This can be seen by the much larger differences in subcomponents observed. Male Roegadyn scored higher in the Socializing (+1.5%), while female

Roegadyn scored higher in the Discovery (+1.4%) and Customisation (+1.4%) subcomponents.

It is difficult to identify any generalized correlations in playstyle motivations and avatar features as the results for Roegadyn would seem to indicate that the larger characters focus more on immersion, whereas it is the Au Ra females, not the males with the higher scores in the immersion components subcomponents. We can see a potential difference between different races, though whether this is connected to certain visual avatar features needs further study.

Chapter 4: Observation Study

4.1 Hypotheses

Overall, we explore the extent of influence the aesthetic features of an avatar can have over how the player will interact with the game world. The aim is to identify and explore the difference in playstyle that may occur depending on player avatar, and the level of influence the player avatar has on the player be it consciously or subconsciously.

> ***Hypothesis 1:*** *There any identifiable correlations between a character's appearance and how players will choose to play it. In relation to the role system established in the MMO format outlined in the previous chapter.*
>
> ***Hypothesis 2:*** *A player's interaction with the game world will change depending on player avatar's appearance. A player's goals and/or allocation of time will change depending on their avatar's appearance.*

4.2 Participant Information

A total of 8 participants were chosen within the age range of 18-35. These participants were chosen based on their familiarity with roleplaying games and in particular the studies focused game of Skyrim. Those overly familiar

with the game were discounted in order to gain a more genuine character building experience (i.e. Players may shy away from the main story if they already know the narrative). Therefore the experience of the participants ranged from non-existent to competent at traversing similar roleplaying games.

The participant pool was kept at a gender ratio of 1:1 to minimize any gender bias. Although not explicitly looking at the results in terms of participant gender, an interesting anomaly occurred where even though both gender groups contained participants who created characters of the opposite gender; the final character pool retained this 1:1 ratio.

4.3 Procedure and Measures

The observation study was conducted across two sessions for each participant, each of these sessions was 2 hours long. In each session the participant played through the video game *'Skyrim'* while the researcher recorded their activity. In the first of these sessions the participant created their own character and played through the tutorial before spending the remainder of the session allocating their time to whatever activity they preferred. The time allocated to certain activities was recorded with all possible activities falling within the variables 'Main Objectives', 'Exploration', and 'Side Objectives'.

> ***Main Objectives:*** Time spent progressing through the main storyline of game.

Exploration: Time spent exploring the game world with no other objective in mind.

Side Objectives: Time spent completing side quests and tasks that have no impact on their progress through the main story.

How they advanced their character was also observed in order to compare to the results to the previous survey. In order to get a general idea of the type of role each character was most similar to the characters were examined under the following three headings ‘Armour type’, ‘Weapon type’, and ‘Combat Range’.

Armour Type: What armour the participant chose to use from light, medium, or heavy.

Weapon Type: What weapon the participant chose to use from magic, archery, 2 handed weapons, or 1 handed weapons.

Combat Range: How the participant handled combat within the game, either within melee range, or choosing to remain at range

Based on these results we were able to place the characters within one of the 4 roles established during the survey (Tank, Melee Damage Dealer, Ranged Damage Dealer, and Healer). In this way the results can be related back comparing the physical attributes of current characters to the averaged results from the 3 focused race models from ‘Final Fantasy XIV’.

In the second of these sessions the participant was placed in same point within the game as they left at the end of the previous session. However their characters appearance had been changed into one of two presets.

These presets were either a small female model from one of the game's smallest races, or the largest male model from one of the game's largest races. Although visually the characters race had been changed, the bonuses connected to the new race were removed and the participant was informed. The participant was given the preset character most unlike their created character from the previous session.

Participant Group A Preset Character	Participant Group B Preset Character
	
Name: Preset A **Race:** Bosmer **Gender:** Female **Description:** Designed to be the smallest, neutral featured character possible.	**Name:** Preset B **Race:** Argonian **Gender:** Male **Description:** Designed to be the largest, least human character possible.

Table 12: Table displaying the 2 preset character avatars given to the participants during session 2 of their observation study

The presets themselves were intended to be as different from each as the game would allow in addition to being both as small and large as possible

respectively. The largest possible character customisation combination for Preset B would have resulted in a ‘Nord’, however as the Nord race resembles large humans it was too similar to the combination used by Preset A. The choice was made to go with the least humanoid slightly shorter race of Argorian, which with all possible customisation options set to maximum the slight loss in height was not noticeable.

The participant was informed that in addition to their characters appearance having changed all their character progress was equalised to the highest point of the previous session (i.e. If characters highest skill was using magic, all other combat skills were brought up to the level of the characters highest magic skill). The character's inventory was emptied and gear destroyed. Finally, in order to present the participant with a choice the character was placed back in the largest closest town and given enough gold to buy new equipment. They were instructed to re-equip their character however they desired before the session commenced, and were asked to justify their choices. As in the previous session how the participant allocated their time in regards to the games activities was recorded across the three previous variables.

4.4 Results

4.4.1 Activity Results

The activity results were made into percentage values and grouped depending on which preset the participant was assigned. The purpose of

this was to find the average time allocation difference depending on character size for session 1. Therefore we can identify if there is a significant difference in the results for the larger models in comparison to the smaller models. In addition, if each of these averages are similar to those of the two presets used in session 2, we can assume that the character model itself contributed to the activity choices made by each participant.

Participant Group A *N=4*	**Mean (%)**	**Min (%)**	**Max (%)**
Session 1: Participant Created Characters			
Main Obj	54.46	21.05	78.26
Exploration	27.69	14.47	45.83
Side Obj	17.85	0.00	64.47
Session 2: Character Preset A			
Main Obj	52.12	12.96	76.92
Exploration	39.65	3.85	87.04
Side Obj	8.23	0.00	19.23

Table 13: Table showing the percentage results of the first group of participants across both sessions

As the table above shows the participants in group A remained fairly constant across both sessions in terms of main focus. There was a shift away from side objectives into more objective free exploration, however their overall activity ranking remains constant at *Main Objs* > *Exploration* > *Side Objs*.

Participant Group B	*N=4*	**Mean (%)**	**Min (%)**	**Max (%)**
Session 1: Participant Created Characters				
	Main Obj	29.76	6.98	78.57
	Exploration	21.84	15.12	28.75
	Side Obj	48.40	0.00	77.91
Session 2: Character Preset B				
	Main Obj	66.74	0.00	100
	Exploration	16.59	0.00	33.33
	Side Obj	16.67	0.00	66.67

Table 14: Table showing the percentage results of the second group of participants across both sessions

Participant group B had vastly different results to that of their counterparts. As the table above shows there was a large shift in activity allocation across all variables. The largest of these shifts being away from side objectives and instead focusing on main objectives, doubling the average for session 1. In addition during the second session the participants seemed far more focused on single activities, if they chose to begin focusing on main objectives it was likely they would retain that focus rather than attempting to do multiple activities at the same time. Overall session 1's variables ranked at *Side Objs* > *Main Objs* > *Exploration* and then shifted in session 2 into *Main Objs* > *Side Objs/Exploration.*

4.4.2 Role Allocation Results

In addition to monitoring the time allocation for each participant, the way in which each participant engaged with the combat aspects of the game was also recorded. Each participant was presented with the opportunity to change their combat proficiency at the beginning of the second session, with every combat related skill being normalised to match the highest skill of the previous session. Although the participants were able to adopt more than one combat ‘style’ at any point during the sessions, we found that the vast majority favoured sticking with the single ‘style’ chosen at the beginning of each session.

Furthermore participants seemed to generate the idea of how they wanted to play the character during the character creation process, which led to them attempting to find certain weapons or armour during the tutorial before they presented with its existence. This could be seen most clearly by those participants who created characters exhibiting extreme features. For example, a participant creating the largest character possible was already excitedly conversing with the researcher about how they were creating a giant berserker, and was planning on looking for the largest weapon available as soon as possible. Afterwards when asked about their customisation choices and the effect they could have had the participant stated:

> “ I usually make stealth characters in most rpg’s regardless of their settings but I decided to change things up, so I decided to go with an orc... The plan was to make the most intimidating and menacing

character possible, which is why I geared how I did, and why I chose to follow the companion quests… If I was made to not be an orc I don't think I would have done the companions." (Participant B)

Participant Group A	Weapon Type	Armour Type	Combat Range
Session 1: Participant Created Characters			
Participant A1	1 Handed	Heavy Armour	Melee
Participant A2	2 Handed	Heavy Armour	Melee
Participant A3	Magic	Light Armour	Ranged
Participant A4	2 Handed	Heavy Armour	Melee
Session 2: Character Preset A			
Participant A1	Magic	Light Armour	Ranged
Participant A2	Archery	Light Armour	Ranged
Participant A3	2 Handed	Heavy Armour	Ranged
Participant A4	Magic	Light Armour	Ranged

Table 15: Table showing the gear and combat style taken by participant group A across both sessions

As table 15 shows ¾ of the participants in group A who played large male character models chose to outfit them in heavy armour with melee based combat weapons. However all of these chose to change when presented with the smaller female character model, favouring instead light armour and ranged weaponry. In addition the participant who outfitted their original character with light armour and magic, decided to outfit the smaller character model with heavy armour and a melee weapon. Meaning that

even though they differed from the group in terms of equipment, all of the participants did opt to change from their original combat style.

Participant Group B	Weapon Type	Armour Type	Combat Range
Session 1: Participant Created Characters			
Participant B1	Magic	Light Armour	Ranged
Participant B2	Magic	Light Armour	Ranged
Participant B3	Archery	Light Armour	Ranged
Participant B4	Magic	Light Armour	Ranged
Session 2: Character Preset B			
Participant B1	2 Handed	Heavy Armour	Melee
Participant B2	2 Handed	Heavy Armour	Melee
Participant B3	Archery	Light Armour	Ranged
Participant B4	1 Handed	Light Armour	Melee

Table 16: Table showing the gear and combat style taken by participant group B across both sessions

A similar pattern can be seen in group B, all participants chose to use light armour and ranged weapons for their session one characters. Only one participant chose to not change their style when presented with their session two large male avatar, making them the only participant in the entire study to remain with the same combat style across both sessions.

4.5 Summary

Chapter 4 covered the method and results of an observation study carried out during the research. The purpose was to build on the results of the survey to try and identify any changes in motivation and play style depending on avatar appearance. To test this the study was split into two sessions where the participants were asked to play the video game "Skyrim" for two hours per session.

In the first of these sessions the participant created and played their own character, in the second their character had been changed to one of two presets, outlined in section 4.3. The choice of preset was determined by how dissimilar they were to the original avatar the participant created in session one. The participants were then grouped depending on which preset they were assigned; those assigned 'Preset A' containing 4 participants referred to as 'Group A', and those assigned 'Preset B' containing 4 participants referred to as 'Group B'. During both sessions the participants allocation of time, how they behaved in combat, and what equipment they choose to use were all recorded.

4.5.1 Activity Results Summary

The time each participant allocated to activities was grouped depending on the type of activity they were performing, each activity falling within one of the variables 'Main Objectives', 'Exploration', and 'Side Objectives' outlined in section 4.3. The participants were asked routinely what their

current goals were in order to better ascertain their current motivations, aiding in the placement of activities within these groups. As it would be impossible for the participant to be solely interested in only one of these activities at once the results cannot be completely accurate; even if the participant was asked their motivations every few minutes there would always be a margin for error. In addition the nature of the observation study meant the sessions themselves were never exactly the same length. For example within the 2 hour session block for session 1 the participant was required to create an avatar and play through the tutorial, as these are very structured activities the data recording only started upon their completion; therefore the length of time recorded for each participant varied depending on how long they spent during this phase. To help combat this the results were converted into percentages; resulting in comparable results showing the percentage of their session time each participant dedicated to each activity group. Finally these results were then combined depending on participant group, allowing us to see that groups mean percentage time allocated to each activity group; displayed in the table below.

Activity Results	**Main Objectives (%)**	**Exploration (%)**	**Side Objectives (%)**
Participant Group A *(N=4)*			
Session 1	54.46	27.69	17.85
Session 2	52.12	39.65	8.23
Participant Group B ***(****N=4)*			

Session 1	29.76	21.84	48.40
Session 2	66.74	16.59	16.67

Table 17: Table showing the mean percentage activity results over both sessions separated by preset groups

As shown in the table above, Group A's focus remained unchanged across both sessions. There was a relatively large shift from side objectives (17.85% > 8.23%) into exploration (27.69% > 39.65%), however their overall focus remained at *Main Objs* > *Exploration* > *Side Objs*. Group B's focus changed much more than Group A's between sessions. In session 1 their focus was *Side Objs* > *Main Objs* > *Exploration* which then shifted in session 2 to *Main Objs* > *Side Objs/Exploration.*

4.5.2 Role Allocation Results Summary

How the participants approached combat within the game in addition to how they chose to outfit their character was recorded in order to compare to the role results from chapter 3, section 3.4. In order to identify the role each character was most similar to the participants were assessed using the three variable 'Armour type', 'Weapon type', and 'Combat Range'.

Both groups showed similar results, the larger character models typically chose to use the heavier armour with melee based weapons and combat, while the smaller models chose to use the lighter armour with ranged based weapons and combat. Within Group A three of the four participants

conformed to this rule, with all the participants choosing to change all 3 variables when given the opportunity in session 2. All of Group B followed this trend for Session 1, with three of the four participants choosing to change all variables during session 2. Resulting in only one participant in the study chose to not change any variable when given the opportunity. This indicates at the existence of a correlation between avatar appearance and role selection, similar to that displayed in the survey results.

Chapter 5: Analysis and Evaluation

The research demonstrates that, on some level, players interaction with the game will change depending on the appearance of their avatar. By comparing the results of the observation study with the focused race results taken from the online survey we can begin to better understand the level of influence an avatar's appearance might have on the player. In order to achieve this the role results of the observation study must be converted into a similar format to those of the survey, meaning the participants must be assigned the role their avatar was most similar to. The table below outlines how the results from role allocation section of the observation study (section 4.4.2) were converted to match the roles created in section 3.3.2.

Role Conversion	Weapon Type	Armour Type	Combat Range
Melee Roles			
Tank	1 Handed / 2 Handed	Heavy	Melee
Melee Damage Dealer	1 Handed / 2 Handed	Medium / Heavy	Melee
Ranged Roles			
Healer	Magic	Light	Ranged
Ranged Damage Dealer	Archery / Magic	Light / Medium	Ranged

Table 18: Table showing how the results of the observation study were converted into roles

As the study was conducted using the single player game of ‘Skyrim’ the group orientated roles of ‘Tank’ and ‘Healer’ are difficult to differentiate from their similar ‘Damage Dealing’ counterparts. However if we refer to the survey data we see that this same grouping of ‘Tank’ and ‘Melee Damage Dealer’ against ‘Healer’ and ‘Ranged Damage Dealer’ can be seen there also. The survey data indicated that the larger character models were more likely to be either ‘Tank’ or ‘Melee Damage Dealer’, whereas the smaller character models were typically ‘Healer’ or ‘Ranged Damage Dealer’. These results were replicated in the observation study as shown in the table below, nearly all of the participants followed this rule.

Participant Role Conversion	**Session 1**	**Session 2**
Participant Group A	*Large Character Model*	*Small Character Model*
Participant A1	Melee Damage Dealer / Tank	Ranged Damage Dealer / Healer
Participant A2	Melee Damage Dealer / Tank	Ranged Damage Dealer
Participant A3	Ranged Damage Dealer / Healer	Melee Damage Dealer / Tank
Participant A4	Melee Damage Dealer / Tank	Ranged Damage Dealer / Healer
Participant Group B	*Small Character Model*	*Large Character Model*
Participant B1	Ranged Damage Dealer / Healer	Melee Damage Dealer / Tank
Participant B2	Ranged Damage Dealer / Healer	Melee Damage Dealer / Tank
Participant B3	Ranged Damage Dealer	Ranged Damage Dealer

Participant B4	Ranged Damage Dealer / Healer	Melee Damage Dealer / Tank

Table 19: Table showing the results of the observation study converted into roles over both sessions separated by preset groups

Overall then, the results presented in both chapters 3 and 4 support the first of the researches hypothesis (Hypothesis 1), indicating that there are clear correlations between an avatar's appearance and how the player will choose to play it. Specifically, we found significant associations between the avatar's character size and the role they will typically select; larger character models being more likely to choose a melee role, opposed to smaller character models preferring ranged roles. In addition, the majority of participants over both groups not only followed this trend but were influenced to change when their avatar changed appearance. This would seem to indicate that not only is the influence of an avatar's appearance substantial, it is controllable by the game designers. For example, if a game designer believed that a certain game race should thematically prefer a melee role, they could increase the minimum available character model size.

Applying this to *'Final Fantasy XIV'* the race of 'Roegadyn' would appear too been engineered to prefer melee roles, whereas the race 'Lalafell' would appear to of been engineered to prefer ranged roles. On average they appear to conform to this trend, which maintains the thematic vision of the game designer. In this way the game designer can create thematic differences between the races in a way that represents the intended

narrative of the game without inhibiting the player by restricting their role selection dependant on what race they choose.

We also found support for the researches Hypothesis 2. The results from both chapters 3 and 4 do indicate that a player's activities are influenced by the appearance of their avatar. Although both sets of results fail the nature of this influence, changes were observed yet lacked consistency. The results of chapter 3's survey show clear differences between the averages of the three observed races, however unlike the role allocation results which showed groupings of the smaller character models of 'Lalafell' and female 'Au Ra', against the large character models of 'Roegadyn' and male 'Au Ra' the activity results were less simple. Although a difference in motivations can be seen between 'Lalafell' and 'Roegadyn', the male 'Au Ra' were more similar to 'Lalafell', while the female 'Au Ra' were more similar to 'Roegadyn'. This would seem to indicate that since there is an observable difference between the races, the avatar's appearance may influence the player's motivations, although character model size does not seem to play a large part.

This lack of consistent change influenced the creation of the preset characters used in chapter 4's observation study by making the difference between both presets greater than just character model size. Consequently the activity results of the study become much more generalized, instead of testing what changes occur and being able to link said changes to any specific appearance changes, the study instead tested if there was a change between two very different character appearances.

We found that participants of Group A failed to show substantial differences in time allocation over both sessions, however the participants of Group B showed a large shift in time allocation consistent to the larger character models used by Group A in session 1. Therefore the results from Group B indicate the potential influence of character appearance, however as Group A failed to show significant change, the study failed to produce any further conclusions pertaining to Hypothesis 2.

5.1 Limitations of research

Our pool of observation study participants was small, non-randomly selected, and not limited to those without prior interaction with the game ‘Skyrim’. The participants were drawn exclusively from New Zealand, almost entirely from students within the university. Each session was kept relatively short when compared to the average lifespan of a player character within ‘Skyrim’. The shortness of the sessions, combined with the structure of the game resulted in the results lacking variety; the participants spent time learning the game, playing through the same generic activities before they felt comfortable enough to make their own decisions as to how to allocate their time. Therefore although the results may be used to identify the trends previously observed in the survey they may not accurately represent the average player.

Although the research supplies a means to compare the results from the observation study to those of the online survey, as the games differ in

genre the comparison cannot be perfect. Ideally the survey and the observation study would have been conducted on the same game, however the lack of responses from the single player games included in the survey made this difficult. The reasoning behind not using an MMORPG for the observation study was the time investment in the single player game was more rewarding for the player resulting in a wider variety of results. Due to the nature of MMORPGs the availability of activities open up relative to the time the player invests within the game, the variety of available activities to new players then is very limited. As the time each participant had with the game was relatively short the activity results would all be highly similar as each participant would be required to play through the structured system of the game in order to progress.

For example, ‘Final Fantasy XIV’s main story quests are locked by the player’s level, the player is instructed to complete side quests in order to raise their level so that they may progress through the story. At the beginning of the game the majority of these quests award similar experience, thus the number of quests required to increase the player's level will always be similar. Regardless of what the player wants to achieve, they are required to partake in the same content in order to gain access to the activity they desire. Therefore if ‘Final Fantasy XIV’ was used during the observation study the results would simply show the speed at which the participant became acclimatized to the games system and completing its objectives, as opposed to the sandbox system used by ‘Skyrim’ where the player is able to do as they please once they have completed the tutorial.

5.2 Future Work

Based on the user study and findings reported in our results, we discovered the potential of future work and research that may be done to this project. Although not conclusive the results of this study can at least be evidence of proof of concept, to be built upon in future research. Although the games used may differ by grouping the available attribute and gear customization options the game offers under the heading of the four roles, as we did with the observation study, we can compare a far wider range of role playing games than just those that use similar class systems. Based on the results and feedback from the observation study we can suggest a revised observation study aimed at refining the activity results.

The largest miscalculation made within the current observation study was the length of time each participant had with the game. Although steps were taken to combat this by using a single player game (requiring less required time commitment than MMOs) the time given was still far too short. One answer would be to greatly lengthen the session time per participant, however requiring the participant to play for large periods of time could result in them viewing each session as a chore, warping the results away from representing the average player. The suggestion then is to change the format of the study to three sessions, each 2 hours long. How each session could be structured is outlined below:

Session 1: In the first session the participant is asked to create their avatar and become acquainted with the game. Once the session is complete the participant is asked to play an additional 10 hours in their own time before the next session, keeping rough diary entries every 2 hours describing how they allocated their time and their justification for doing so. This allows the participant to immerse themselves within the game world and their avatar at their own pace, it also allows the participant time to further progress down their chosen path within the game minimising any content gating bias.

Session 2: In the second session the participant continues to play their own avatar, and is asked to justify their actions in 10 minute blocks. This will build a more accurate representation of the participants motivations in regards to activities as each participant will be more acquainted with the game world and what it has to offer in the way of content. At the end of this session the participant is presented with their assigned preset avatar, and again asked to play a further 10 hours before the final session, describing their progress in 2 hour blocks.

Session 3: The third and final session will operate much like the second session, with the participant playing their preset avatar and justifying their actions in 10 minute sections.

In this way the researcher is able to collect 10 hours of diary logs for each avatar, and 2 hours of qualitative activity reports which can be compared to produce much more accurate activity results.

Chapter 6: Conclusion

In Chapter 1, it was noted that even though game studies is a rapidly growing field, research into how the visual features of a game might affect the act of play is still lacking. It was theorised that if we could first identify any correlations between visual features such as avatar appearance and the way in which the player plays the game, we could begin to understand the magnitude (if any) of influence these visual features may possess. Motivated by identifying these potential correlations the research aimed to test if it was possible to influence a player to unwittingly play in a certain way by changing nothing more than the appearance of their player avatar. The example used was; is it possible to strongly encourage a player who created an ‘orc’ in ‘World of Warcraft’ to play in a style that has been predetermined to be thematically appropriate, without inhibiting their play in any way other than by limiting the avatar customisation options available to them.

Chapter 2 presented a literature review on the main themes of the research. To begin with it covered the way players interact with games, and how this interaction differs to that of the classic HCI structures, resulting in a difference in the terms ‘user’ and ‘player’. We look at how this interaction might be measured through the use of ‘Activity Theory’ and the ‘Activity Hierarchy’, both consisting of examining the relationships occurring between a subject, an object, artifacts, and motives. Barr (2008) believes this can be expanded to include the contributing factors behind

the generation of motives, asserting that values can contribute towards or even provide motivation.

It then provided an overview on how the act of play might be influenced by values, and how these values may be held by not only the player, but the game itself (Barr, 2007). The values held by the player can be influenced by external sources, contributing towards a change in overall behaviour of the subject (Conroy, 1976). This already being passively utilized by video games order to influence the player into interacting with the game in an acceptable manner, games control the players conduct through various reward systems (Skinner, 1974). The effectiveness of such systems scaling with how immersed the player in within the video game (Skinner, 1974), immersion being the sense that a player has of being within a virtual world (Lombard, 2004: 97). Finally Chapter 2 provides an overview on how the player both becomes immersed and interacts within the game through their virtual identity or avatar.

The development process was divided into two phases: An online Survey (Chapter 3) designed to identify any larger correlations, and a small scale observation study (Chapter 4) designed to test any of the identified correlations.

The survey (Chapter 3) was focused on the avatars within the MMORPG ‘Final Fantasy XIV’. The responses were grouped based on the avatar characteristics of race and gender and were analysed both by using Yee’s (2007) player motivation components, and by what group role the respondent had indicated they played. As the survey was relatively small

the results gathered by comparing motivations suffered, however there was a clear difference between the three chosen sample races. This indicated that although the scale of the survey prevented us from identifying particular correlations, we could at least see that the motivations of each race differed. This would seem to indicate that either the values of the player influence the choice of avatar race heavily, or that the race itself influences the motivations of the player with its own set of values.

Although still hindered by the scale of the survey the results of the role selection data had far less variables, making identifying trends far easier. The results show a clear correlation between character model size and preferred role; the large character models preferring the two melee roles of ‘Tank’ and ‘Melee Damage Dealer’, and the small character models preferring the two ranged roles of ‘Healer’ and ‘Ranged Damage Dealer’.

A qualitative user study was conducted (Chapter 4) to evaluate the potential correlations identified in the survey. In order to test if the player avatar’s appearance influenced the motivations of the player, the test consisted of each participant playing two separate avatars; one they created, and one they were assigned based on the appearance of the first. Two presets were used (one large, and one small) and were assigned based on how dissimilar they were to the participants created avatar, resulting in two groups of participants who each played a session as both a large and small avatar. How they allocated their time to the games activities within the session (along with their motivations for certain activities) and what role their avatar was most similar to was recorded.

Similar to the survey results the activity results remained inconclusive. Although there was an observable change in motivations across sessions, it lacked consistency across groups. However once again the results of the role selection data were far more conclusive, the majority of participants conformed to the same trend identified in the survey. Furthermore when the participant's avatar was changed, the majority of participants changed the roles to conform to this trend. This indicates that changing the avatar's appearance does influence the values of the player in terms of what role they choose to play (in this case larger models gravitating towards melee roles, and smaller models preferring ranged roles) regardless of how the player would play if they created their own avatar.

The results gathered in this thesis go towards proving that the visual features of video games do have influence over the player. In particular the visual features connected to the player avatar seem to directly influence the way in which the player believes it should interact with the game world around them. These results would seem to indicate that game designers have the opportunity to influence players to thematically play in a certain way without restricting the player outside of visual customisation options, greatly increasing the immersion for both the player and the players around them.

The overall goal of this thesis was to identify any influence design choices might have on how a player interacts within a game world. Although the exact scale and nature of this influence remains unknown, further

exploration into the design possibilities the influence may allow could greatly benefit players and designers alike.

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Chapter 8: Appendix

Online Survey Participant Information Sheet

Participant Information Sheet

Ethics Committee, Faculty of Computing and Mathematical Sciences

Project Title

Does (Interface/Avatar/Style) influence how a player interacts with the game (Moral Choices/Roleplay/Engagement)? Can this be controlled?

Purpose

This research *or related activity* is conducted as partial requirement for *Masters in Graphic Design.* This project requires the researcher to choose a topic and conduct research on the topic through using surveys or interviews or a combination of the two techniques.

What is this research project about?

This project investigates the potential correlations between avatar customization, game world environment, control system and overall play style.

What will you have to do and how long will it take?

Participants are required to complete an online survey. This survey contains 49 questions and should take no longer than *15 minutes*. The researcher may ask for relevant documents or sources accessible for this research.

What will happen to the information collected?

The information collected will be used by the researcher to write a research report to contribute towards a Masters of Graphic Design. It is possible that articles and presentations may be the outcome of the research. Only the researcher *and supervisor* will be privy to any notes, documents and the paper written. Afterwards, notes, documents will be destroyed. The researcher will keep a copy of the surveys but will treat them with the strictest confidentiality.

For the duration of the study the raw data will be stored in a private google spreadsheet, which will be made available to the participants via a link upon completion of their survey. The individual character data such as screenshots and character descriptions will be kept in the researchers private google drive and will be deleted once the study has been completed. No participants will be named in the publications and every effort will be made to disguise their identity.

Declaration to participants

If you take part in the study, you have the right to:

- Refuse to answer any particular question, and to withdraw from the study before the completion of the survey.
- Ask any further questions about the study that occurs to you during your participation.
- Be given access to a summary of findings from the study when it is concluded.

Who's responsible?

If you have any questions or concerns about the project, either now or in the future, please feel free to contact either:

Researcher:

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Observation Study Participant Information Sheet

Ethics Committee, Faculty of Computing and Mathematical Sciences

Project Title
To what extent does graphical customisation influence play style and how the player interacts with the game?

Purpose
This research is conducted as partial requirement for a University of Waikato Masters Thesis.

What is this research project about?
This project investigates the potential correlations between avatar customization, game world environment, control system and overall play style.

This research sets out to determine:

1. Would the same player adhere to the same play style regardless of game world? Or would the environment influence them into playing differently.
    a. If a player acted “morally good” within a fantasy game world, would they continue to act this way in a more realistic game world?
2. Would the same player make different choices depending on avatar?
    a. If a similar choice was presented to a player with two entirely separate avatars, would their choice remain constant?
    b. Evaluates if the values of the player would be influenced by the values they have observed from the avatar.
        i. If the player observes their avatar performing actions against their personal values, would they continue these actions when given the chance.

What will you have to do and how long will it take?
The researcher will observe you playing through a video game, occasionally asking you questions about the choices you make while playing. Each observation study should take approximately 2 hours. You will be asked to give consent prior to the study, and maybe asked to also give consent at a later stage.

What will happen to the information collected?
Data collected will be kept as paper records and digital documents. Only the researcher and supervisor will have access to all documentation involved with this research. For the

duration of the study all documents will be kept in the CGRD Post-Graduate Lab (G.G.20) on a password protected computer.

After this time all documents will be destroyed. No participants will be identified in the publications and every effort will be made to disguise their identity in raw research notes.

Declaration to participants
If you take part in the study, you have the right to:

- Refuse to answer any particular question, and to withdraw from the study before 7 days following the final observation study where analysis will have commenced on the data.
- Ask any further questions about the study that occurs to you during your participation.
- Be given access to a summary of findings from the study when it is concluded.

Who's responsible?
If you have any questions or concerns about the project, either now or in the future, please feel free to contact either:

Researcher:
Alex Robinson
Department of Computer Science
The University of Waikato
ar119@students.waikato.ac.nz

Supervisor:
Tomás García Ferrari
Department of Computer Science
The University of Waikato
tomasgf@waikato.ac.nz

Observation Study Research Consent Form Sample

Research Consent Form

Ethics Committee, Faculty of Computing and Mathematical Sciences

To what extent does graphical customisation influence play style and how the player interacts with the game?

Consent Form for Participants

I have read the Participant Information Sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study before 7 days following the final observation study or decline to answer any question within the study. I understand I can withdraw any information I have provided up until the researcher has commenced analysis on my data. I agree to provide information to the researchers under the conditions of confidentiality set out on the Participant Information Sheet.

I agree to participate in this study under the conditions set out in the Participant Information Sheet.

Signed: _____

Name: _____

Date: _____

Contact Details:

Researcher:
Alex Robinson
Department of Computer Science
The University of Waikato
ar119@students.waikato.ac.nz

Supervisor:
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The University of Waikato
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8.1 Online Survey Information

(*Since the survey will be distributed to communities of both online and offline games, some of the sections were not relevant for both. Some sections focusing on social aspects are irrelevant for single player games. In addition some of the questions in sections A and B were be omitted for the same reason.)

Game	Sections Included	Distribution Website
World of Warcraft (Online)	All	https://www.reddit.com/r/wow/
Final Fantasy XIV (Online)	All	http://www.reddit.com/r/ffxiv/
Eve Online (Online)	All	http://www.reddit.com/r/Eve/

Elder Scrolls Online (Online)	All	http://www.reddit.com/r/elderscrollsonline
Maplestory (Online)	All	https://www.reddit.com/r/maplestory
Star Wars: The Old Republic (Online)	All	http://www.reddit.com/r/swtor/
Tera (Online)	All	https://www.reddit.com/r/TeraOnline/
Guild Wars 2 (Online)	All	http://www.reddit.com/r/Guildwars2/
Aion (Online)	All	http://www.reddit.com/r/Aion
Wildstar (Online)	All	http://www.reddit.com/r/Wildstar
Skyrim (Offline)	(Modified: A, B) G, H, I, J	http://www.reddit.com/r/TESlore
Oblivion (Offline)	(Modified: A, B) G, H, I, J	https://www.reddit.com/r/oblivion

Avatar Format

Avatar	**Text Boxes**
Race	
Gender	
Class	
Time Spent Playing	
Additional *(Optional)*	

Basic Survey

Questions with the “Variable” tag are not included in the single player game sites

Section A.	**Advancement**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	Leveling up your character as fast as possible.						
Question 2.	It is important to me to become powerful.						
Question 3. (Variable)	Being part of a serious, raid/loot-oriented guild.						
Question 4. (Variable)	Acquiring rare items that most players will never have.						

Question 5. (Variable)	How important is it to you to be well-known in the game?						

Section B.	**Mechanics**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	How interested are you in the precise numbers and percentages underlying the game mechanics?						
Question 2.	How important is it to you that your character is as optimized as possible for their profession / role?						
Question 3. (Variable)	How often do you use a character builder or a template (e.g. AskMrRobot, Maxdps) to plan out your character's advancement?						
Question 4.	Knowing as much about the game mechanics and rules as possible.						
Question 5.	Knowing as much about classes other than your own in order to perform better as a group.						

Section C.	**Competition**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	Competing with other players in PvE situations (Damage/Healing Metres)						
Question 2.	Competing with other players in PvP						
Question 3.	How often do you purposefully try to provoke or irritate other players?						
Question 4.	I always try to do better than everyone else						
Question 5.	Doing things that annoy other players						

Section D.	**Socializing**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	Getting to know other players						
Question 2.	Helping other players						
Question 3.	Chatting with other players.						

Question 4.	Being part of a friendly, casual guild						
Question 5.	I often socialize with my guild members outside of the game (Including other games)						

Section E.	**Relationship**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	I often try to form meaningful relationships with other players						
Question 2.	How often do you find yourself having meaningful conversations with other players?						
Question 3.	How often do you talk to your online friends about your personal issues?						
Question 4.	How often have your online friends offered you support when you had a real life problem?						
Question 5.	I am currently or have in the past been involved in a romantic relationship with a player that I met within the game						

Section F.	**Teamwork**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	Would you rather be grouped or soloing?						
Question 2.	How important is it to you that your character can solo well?						
Question 3.	I enjoy working with others in a group						
Question 4.	I prefer larger groups and frequently attempt to complete content with as large of a group as possible						
Question 5.	I highly value my character being self-sufficient						

Section G.	**Discovery**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	How much do you enjoy exploring the world just for the sake of exploring it?						

Question 2.	How much do you enjoy finding quests, NPCs or locations that most people do not know about?						
Question 3.	How much do you enjoy collecting distinctive objects or clothing that have no functional value in the game?						
Question 4.	Exploring every map or zone in the world.						
Question 5.	I often try to obtain mounts and am motivated to by obtaining them						

Section H.	**Role-Playing**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	How often do you role-play your character?						
Question 2.	Trying out new roles and personalities with your characters.						
Question 3.	Being immersed in a fantasy world.						
Question 4.	How often do you make up stories and histories for your characters?						
Question 5.	I often read the lore behind the game						

Section I.	**Customization**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	My character's appearance is more dependent on gameplay advantages rather than being visually appealing (Racial traits, etc.)						
Question 2.	How much time do you spend customizing your character during character creation?						
Question 3.	It is important that my character's armour / outfit matches in colour and style?						
Question 4.	It is important that my character looks different from other characters?						
Question 5.	I often try to obtain visually appealing gear to visually transform my current gear into						

Section J.	**Escapism**		**1** *(Lowest)*	**2**	**3**	**4**	**5** *(Highest)*
Question 1.	I play so I can avoid thinking about some real-life problems or worries?						
Question 2.	I often play to relax from the day's work?						
Question 3.	I am now or have in the past played to escape from the real world						
Question 4.	I often choose to attend online commitments over real life commitments						
Question 5.	I frequently logon just to hang out online						